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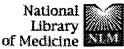
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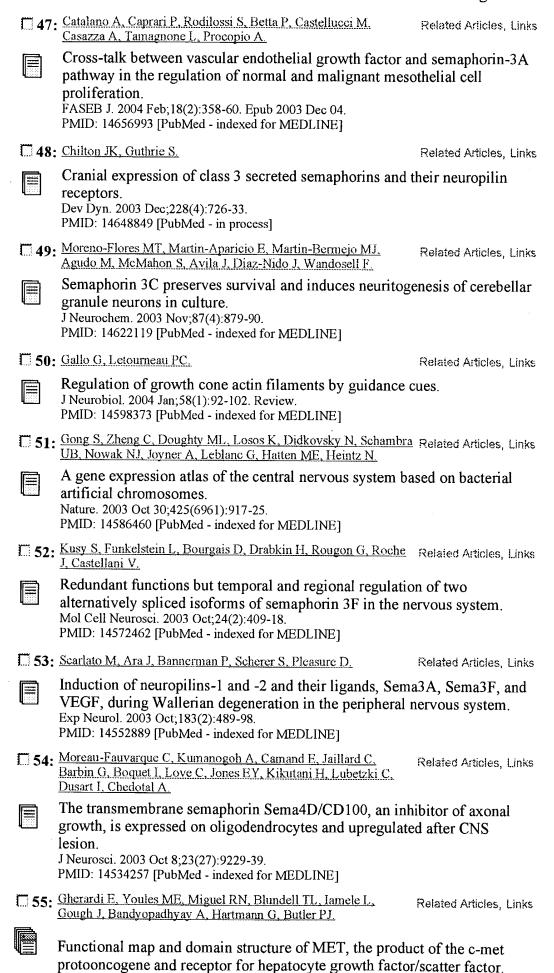
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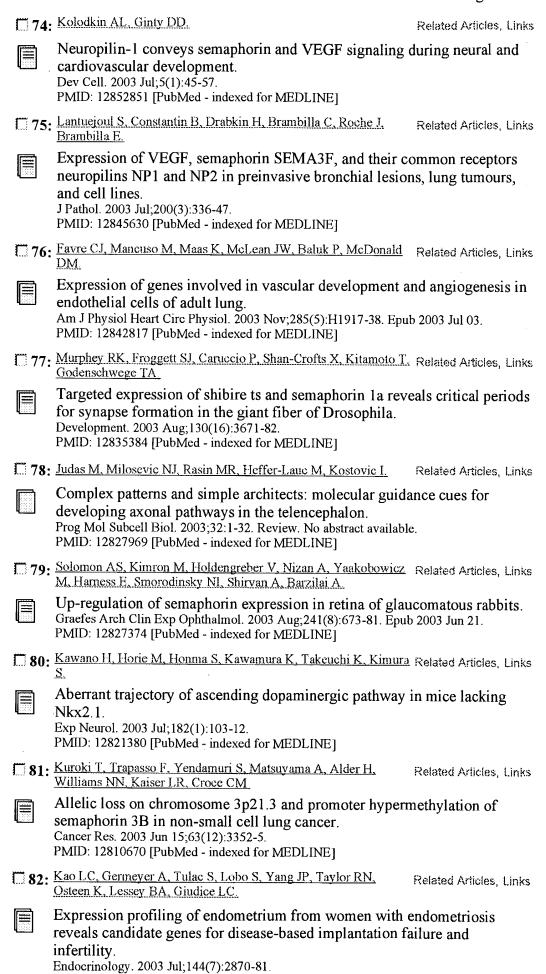
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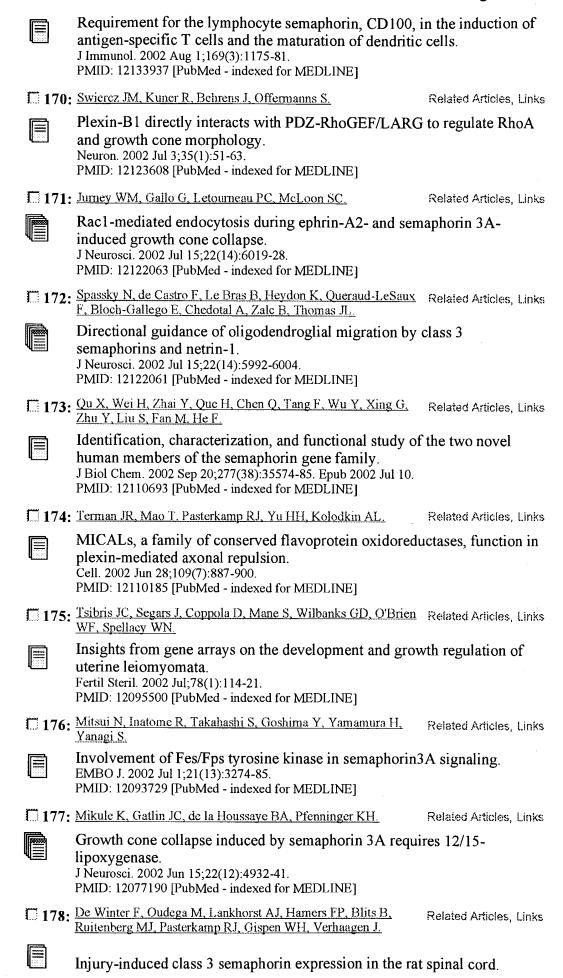
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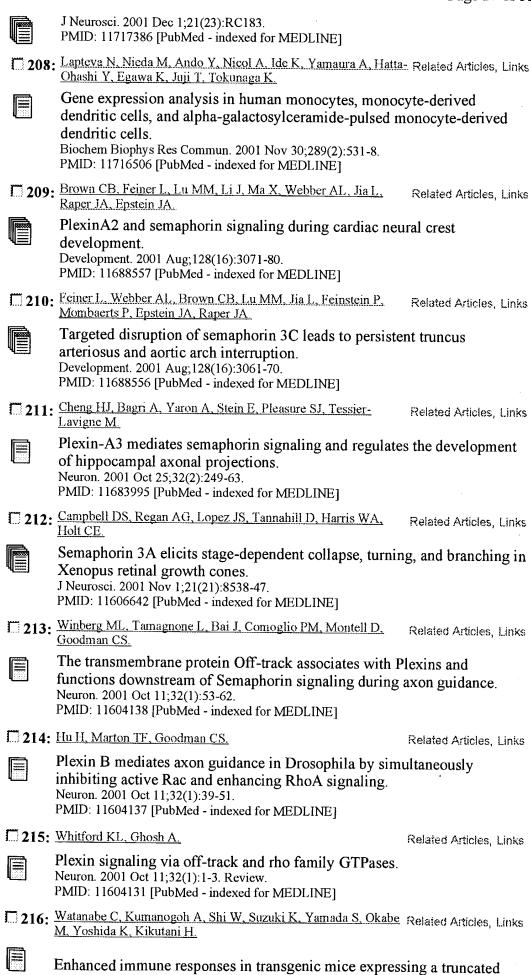
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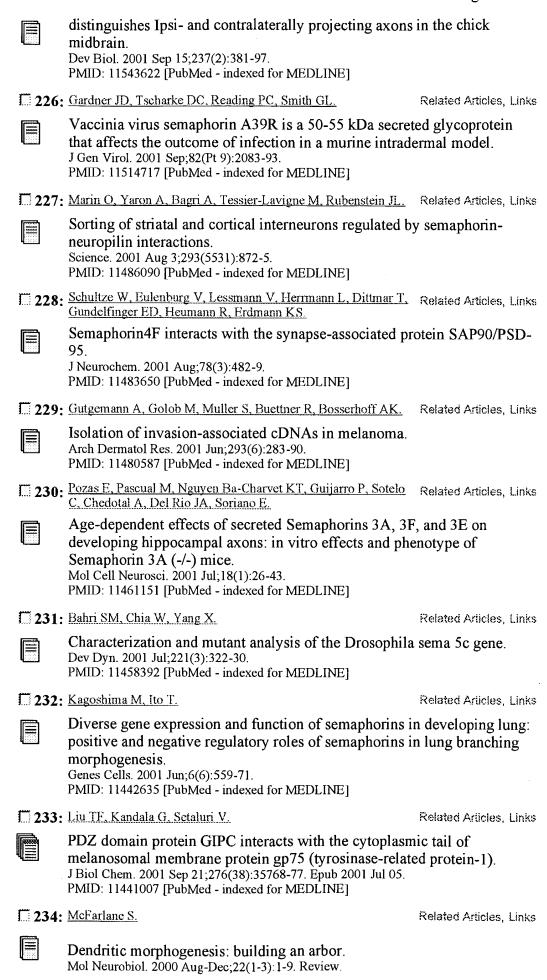
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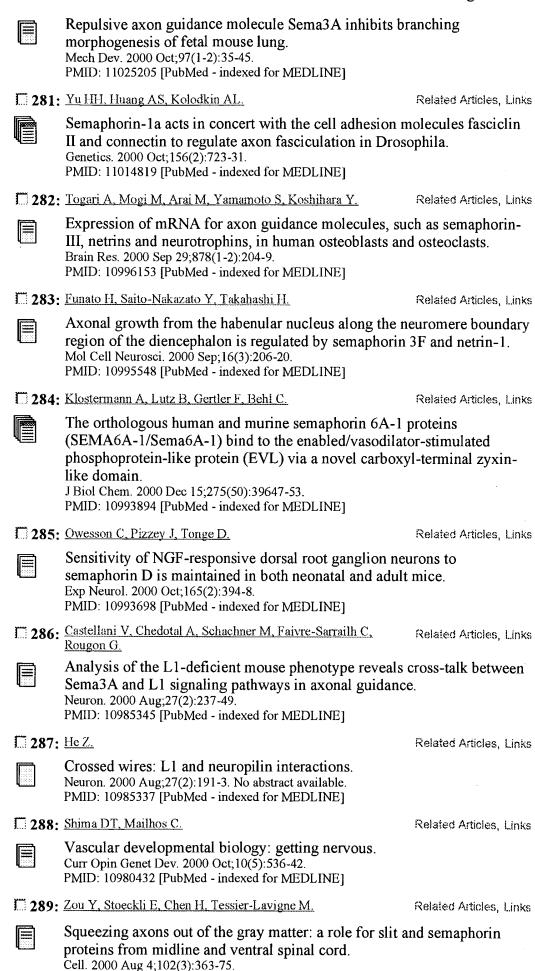
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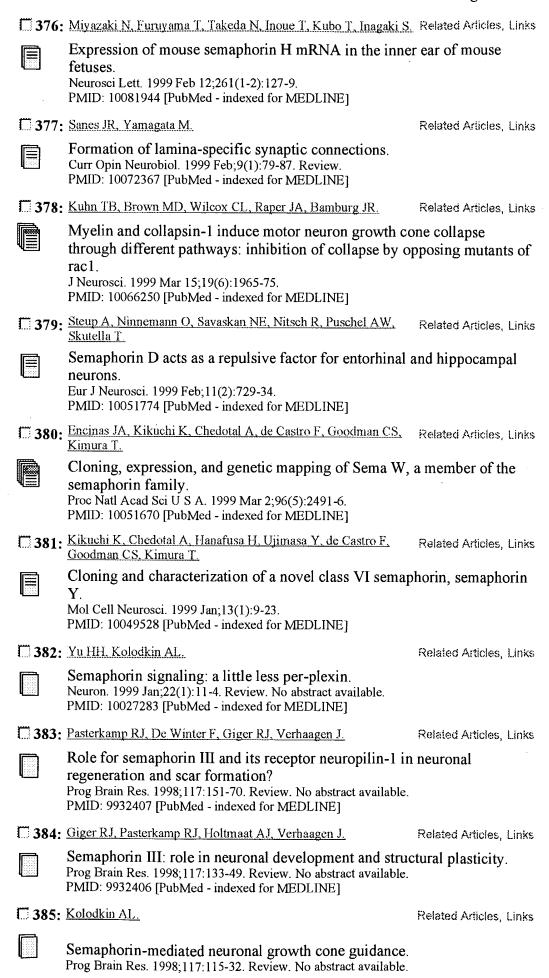
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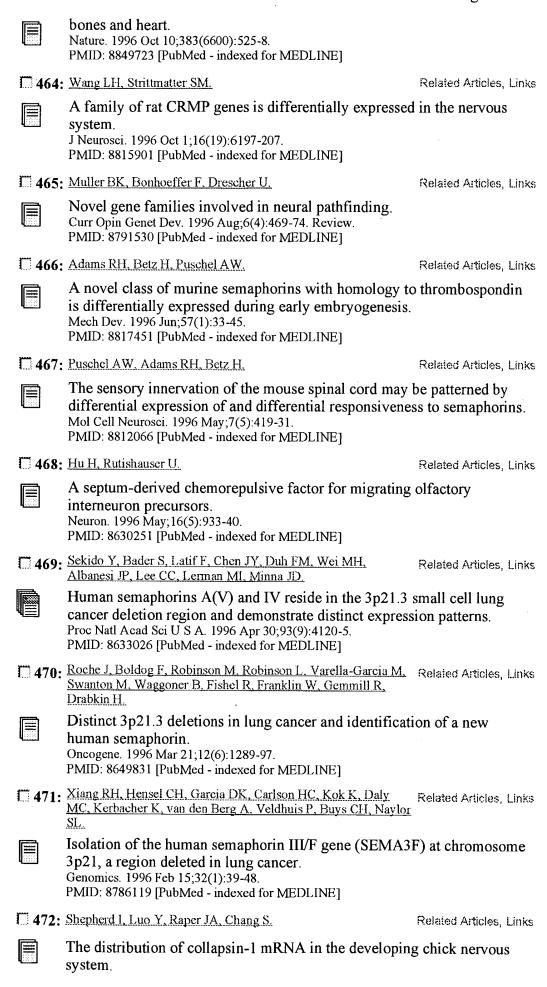
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US 2002-384798P

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        Yue, Henry, Sunnyvale, CA, UNITED STATES
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        Lepley, Denise M., Branford, CT, UNITED STATES Li, Li, Branford, CT, UNITED STATES
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        Pena, Carol E. A., New Haven, CT, UNITED STATES
        Peyman, John A., New Haven, CT, UNITED STATES
        Rastelli, Luca, Guilford, CT, UNITED STATES
        Rieger, Daniel K., Branford, CT, UNITED STATES
        Shimkets, Richard A., Guilford, CT, UNITED STATES Smithson, Glennda, Guilford, CT, UNITED STATES
        Spytek, Kimberly A., New Haven, CT, UNITED STATES Stone, David J., Guilford, CT, UNITED STATES Tchernev, Velizar T., Branford, CT, UNITED STATES Vernet, Corine A.M., Branford, CT, UNITED STATES Voss, Edward Z., Wallingford, CT, UNITED STATES
        Zerhusen, Bryan D., Branford, CT, UNITED STATES
        Zhong, Haihong, Guilford, CT, UNITED STATES
        Zhong, Mei, Branford, CT, UNITED STATES
PΙ
        US 2004033491
                                    20040219
                              Α1
ΑI
        US
           2001-16248
                                    20011210 (10)
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PRAI
        US 2000-254329P
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        US 2001-291037P
                                20010515
                                          (60)
        US 2000-255648P
                                20001214
                                          (60)
        US 2001-297173P
                                20010608
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                                20010731 (60)
        US 2001-309258P
                                20011001 (60)
        US 2001-326393P
        US 2001-315639P
                                20010829 (60)
        Utility
FS
        APPLICATION
LN.CNT
       12259
INCL
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        INCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000; 530/350.000;
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NCL
        NCLM: 435/006.000
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435/069.100; 435/183.000; 435/320.100; 435/325.000; 530/350.000;
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         ICS: C07H021-04; C12N009-00; C12P021-02; C12N005-06
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 L4
      ANSWER 6 OF 86 USPATFULL ON STN
 AN
         2004:24674 USPATFULL
         Classification and prognosis prediction of acute lymphoblastic leukemia
 TI
         by gene expression profiling
        Downing, James R., Cordova, TN, UNITED STATES
Yeoh, Eng-Juh, Singapore, SINGAPORE
Wilkins, Dawn E., Oxford, MS, UNITED STATES
 IN
        Wong, Limsoon, Singapore, SINGAPORE
US 2004018513 A1 20040129
PΙ
        US 2003-391271
ΑI
                              Α1
                                    20030318 (10)
PRAI
        US 2002-367144P
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        Utility
DT
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FS
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IC
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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        2004:2119 USPATFULL
ΑN
        Growth factor homolog ZVEGF4
TI
        Gilbert, Teresa, Seattle, WA, UNITED STATES
Hart, Charles E., Woodinville, WA, UNITED STATES
Sheppard, Paul O., Granite Falls, WA, UNITED STATES
IN
        Gilbertson, Debra G., Seattle, WA, UNITED STATES
PΙ
        US 2004002140
                                   20040101
                             Α1
ΑI
        US 2001-876813
                             Α1
                                   20010606 (9)
        Division of Ser. No. US 2000-564595, filed on 3 May 2000, GRANTED, Pat.
RLI
        No. US 6495668
        US 1999-132250P
PRAI
                               19990503 (60)
        US 1999-164463P
US 2000-180169P
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                               20000204 (60)
DT
        Utility
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FS
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        INCLM: 435/069.400
        INCLS: 435/320.100; 435/325.000; 530/399.000; 514/012.000; 536/023.500
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 8 OF 86 USPATFULL ON STN
L4
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AN
TI
        Polynucleotides and proteins encoded thereby
IN
        Shimkets, Richard A., West Haven, CT, United States
РΑ
        CuraGen Corporation, New Haven, CT, United States (U.S. corporation)
PΙ
        US 6689866
                             В1
                                   20040210
        US 2000-520781
US 1999-123667P
ΑI
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PRAI
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               435/006.000; 435/007.100; 435/069.100; 530/300.000
IC
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 9 OF 86 CAPLUS COPYRIGHT 2004 ACS ON STN DUPLICATE 3
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     2003:972338 CAPLUS
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     140:35905
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Semaphorin-like proteins (NOV2) and cDNA sequences and methods of using
TI
      same for modulating angiogenesis, cell motility, and actin filament
      formation
      Alvarez, Enrique; Anderson, David W.; Dhanabal, Mohanraj; Khramtsov,
IN
      Nikolai V.; Larochelle, William J.; Lichenstein, Henri Š.; Li, Li; Ooi,
      Chean Eng; Padigaru, Muralidhara; Shimkets, Richard A.; Zhong, Mei
PA
      Curagen Corporation, USA; Li, li; et al.
SO
      PCT Int. Appl., 197 pp.
      CODEN: PIXXD2
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LA
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PΙ
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                                19990309
      US 2000-520781
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L4
      ANSWER 10 OF 86 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
AN
      2003:818529 CAPLUS
DN
      139:318454
TI
     Human cDNA sequences and their encoded proteins and diagnostic and
      therapeutic uses
IN
      Alsobrook, John P., II; Anderson, David W.; Boldog, Ferenc L.; Burgess,
                    Casman, Stacie J.; Edinger, Shlomit R.; Gerlach, Valerie L.;
      Catherine E.:
     Grosse, William M.
     Curagen Corporation, USA
PA
SO
      PCT Int. Appl., 324 pp.
     CODEN: PIXXD2
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              RU, TJ,
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US 2003-403676
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      US 2001-303168P
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L4
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        2003:330208 USPATFULL
 AN
ΤI
        Molecules interacting with CASL (MICAL) polynucleotides, polypeptides,
        and methods of using the same
ΙN
        Kolodkin, Alex L., Baltimore, MD, UNITED STATES
        Terman, Jon R., Baltimore, MD, UNITED STATES
        Mao, Tiany, Parkville, MD, UNITED STATES
        Pasterkamp, Ronald J., Baltimore, MD, UNITED STATES
        Yu, Hung-Hsiang, Lynnwood, WA, UNITED STATES
PΙ
        US 2003232419
                                   20031218
                             Α1
        US 2003-359012
ΑI
                             Α1
                                   20030204 (10)
        US 2002-354178P
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PRAI
        US 2002-384302P
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        US 2002-388325P
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DT
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               435/191.000
        NCLS:
               435/069.100; 435/320.100; 435/325.000; 530/388.260; 435/006.000;
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IC
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        ICM: C12Q001-68
        ICS: G01N033-53; G01N033-567; C12N009-06; C12P021-02; C12N005-06;
        C07K016-40; C07H021-04
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L4
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        2003:318667 USPATFULL
        Genes that are up- or down-regulated during differentiation of human
        embryonic stem cells
        Stanton, Lawrence W., Singapore, SINGAPORE
Brandenberger, Ralph, Menlo Park, CA, UNITED STATES
       Gold, Joseph D., San Francisco, CA, UNITED STATES Irving, John M., San Mateo, CA, UNITED STATES Mandalam, Ramkumar, Union City, CA, UNITED STATES
        Mok, Michael, Palo Alto, CA, UNITED STATES
        Shelton, Dawne, Salt Lake City, UT, UNITED STATES
        US 2003224411
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        US 2003-388578
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        Utility
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INCL
        INCLM: 435/006.000
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       ICM: C12Q001-68
        ICS: G01N033-53; G01N033-567; C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 13 OF 86 USPATFULL ON STN
       2003:78594 USPATFULL
       Novel polynucleotides and proteins encoded thereby
       Shimkets, Richard A., West Haven, CT, UNITED STATES
```

AN

TI

IN

PΙ

ΑI

DT FS

IC

L4

AN TI

IN

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LaRochelle, William J., Madison, CT, UNITED STATES US 2003054514 A1 20030320
PΙ
       US 2001-957187
ΑI
                           Α1
                                 20010919 (9)
       Continuation of Ser. No. US 2000-520781, filed on 8 Mar 2000, PENDING
RLI
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       US 1999-123667P
       US 2000-234082P
                             20000920 (60)
       US 2000-233798P
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       US 2000-174485P
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 14 OF 86 USPATFULL on STN
ΑN
       2003:3497 USPATFULL
       Novel nucleic acid sequences encoding human slit-, megf-, and
TI
       roundabout-like polypeptides
IN
       Shimkets, Richard A., West Haven, CT, UNITED STATES
PA
       CuraGen Corporation, New Haven, CT, UNITED STATES, 06511 (U.S.
       corporation)
PΙ
       US 2003003532
                           Α1
                                 20030102
ΑI
       us 2001-991053
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RLI
       Continuation of Ser. No. US 2000-520781, filed on 8 Mar 2000, PENDING
PRAI
       WO 2000-US6280
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TC
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       ICS: C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 15 OF 86 USPATFULL ON STN
14
       2003:279232 USPATFULL
AN
TI
       Antibodies specific for semaphorin-like polypeptides
       Boyle, Bryan J., San Francisco, CA, United States
IN
       Yeung, George, Mountain View, CA, United States
       Arterburn, Matthew C., Los Gatos, CA, United States
       Mize, Nancy K., Mountain View, CA, United States
       Tang, Y. Tom, San Jose, CA, United States
       Liu, Chenghua, San Jose, CA, United States
       Drmanac, Radoje T., Palo Alto, CA, United States
               Inc., Sunnyvale, CA, United States (U.S. corporation)
742 B1 20031021
PA
       Nuvelo,
       US 6635742
PΙ
ΑI
       US 2000-653274
                                 20000831 (9)
RLI
       Continuation-in-part of Ser. No. US 2000-491404, filed on 25 Jan 2000,
       now abandoned
DT
       Utility
FS
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LN.CNT
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INCL
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              435/252.300; 435/320.100; 435/325.000; 435/007.100; 536/023.100;
       INCLS:
               536/024.100; 424/130.100
NCL
       NCLM:
               530/387.100
       NCLS:
              424/130.100; 435/007.100; 435/252.300; 435/320.100; 435/325.000;
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       ICM: C07K016-00
       ICS: G01N033-53; C12N001-20; C12N015-00; C12N015-09; C12N005-00;
       C07H021-02; C07H021-04; A61K039-395
435/7.1; 435/320.1; 435/325; 435/252.3; 536/23.1; 536/24.1; 530/387.1;
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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L4
      ANSWER 16 OF 86 USPATFULL on STN 2003:59938 USPATFULL
ΑN
TI
        Growth factor homolog zvegf3
        Gao, Zeren, Redmond, WA, United States
IN
        Hart, Charles E., Woodinville, WA, United States
        Piddington, Christopher S., Thousand Oaks, CA, United States
        Sheppard, Paul O., Granite Falls, WA, United States
Shoemaker, Kimberly E., Bellevue, WA, United States
        Gilbertson, Debra G., Seattle, WA, United States
        West, James W., Seattle, WA, United States
ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)
US 6528050
B1 20030304
PA
PΙ
        US 2000-706968
ΑI
                                   20001106 (9)
        Continuation of Ser. No. US 2000-541752, filed on 31 Mar 2000
RLI
        Continuation-in-part of Ser. No. US 1999-457066, filed on 7 Dec 1999
PRAI
        US 1999-165255P
                               19991112 (60)
        US 1999-161653P
                               19991021 (60)
        US 1999-142576P
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FS
LN.CNT 4336
INCL
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NCL
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IC
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        ICM: A61K045-00
EXF
        424/85.1; 424/198.1; 530/351; 530/399
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L4
      ANSWER 17 OF 86 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
      on STN
      2004000561 EMBASE
AN
TI
      Role of semaphorins in the adult nervous system.
ΑU
      De Wit J.; Verhaagen J.
      J. Verhaagen, Graduate School of Neuroscience, Netherlands Inst. for Brain
CS
      Research, Meibergdreef 33, 1105 AZ Amsterdam, Netherlands.
      j.verhaagen@nih.knaw.nl
SO
      Progress in Neurobiology, (2003) 71/2-3 (249-267).
      Refs: 167
      ISSN: 0301-0082 CODEN: PGNBA5
CY
      United Kingdom
DT
      Journal: General Review
FS
      800
              Neurology and Neurosurgery
      029
               Clinical Biochemistry
      English
      English
SL
     ANSWER 18 OF 86 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ΑN
      2003:585151 BIOSIS
DN
     PREV200300586083
TI
     SEMA6A, a new molecule for activated langerhans cells.
     Gautier, G. [Reprint Author]; de Saint-Vis, B. [Reprint Author]; Pin, J.-J. [Reprint Author]; Trinchieri, G. [Reprint Author]; Caux, C. [Reprint
     Author]; Garrone, P. [Reprint Author]
CS
     Laboratory for Immunological Research, Schering-Plough, 27, Chemin des
     Peupliers, 69571, BP11, Dardilly, France
S<sub>0</sub>
     European Cytokine Network, (Sept 2003) Vol. 14, No. Supplement 3, pp. 94.
     print.
     Meeting Info.: Annual Meeting of the International Cytokine Society.
Dublin, Ireland. September 20-24, 2003.
     ISSN: 1148-5493.
DT
     Conference; (Meeting)
     Conference; Abstract; (Meeting Abstract)
     English
ED
     Entered STN: 10 Dec 2003
     Last Updated on STN: 10 Dec 2003
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AN
     2004:205153 BIOSIS
DN
     PREV200400205680
TI
     Abnormal cerebellar granule cell migration in the cerebellum of
        ***semaphorin***
                               ***6A***
                                           - deficient mice.
ΑU
     Chedotal, A. [Reprint Author]; Kerjan, G. [Reprint Author]; Cases, O.;
     Mitchell, K.
```

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CNRS UMR7102, Universite Paris 6, Paris, France
     Society for Neuroscience Abstract Viewer and Itinerary Planner, (2003) Vol. 2003, pp. Abstract No. 870.5. http://sfn.scholarone.com. e-file.
SO
     Meeting Info.: 33rd Annual Meeting of the Society of Neuroscience. New
     orleans, LA, USA. November 08-12, 2003. Society of Neuroscience.
DT
     Conference; (Meeting)
     Conference; Abstract; (Meeting Abstract)
     English
ΙΔ
     Entered STN: 14 Apr 2004
FD
     Last Updated on STN: 14 Apr 2004
     ANSWER 20 OF 86 USPATFULL on STN
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        2002:314716 USPATFULL
        Growth factor homolog zvegf3
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        Gao, Zeren, Redmond, WA, UNITED STATES
IN
        Hart, Charles E., Woodinville, WA, UNITED STATES
        Piddington, Christopher S., Thousand Oaks, CA, UNITED STATES
        Sheppard, Paul O., Granite Falls, WA, UNITED STATES
        Shoemaker, Kimberly E., Bellevue, WA, UNITED STATES
        Gilbertson, Debra G., Seattle, WA, UNITED STATES
       West, James W., Seattle, WA, UNITED STATES
       ZymoGenetics, Inc. (U.S. corporation) US 2002177193 A1 20021128
PA
PΙ
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ΑI
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RLI
PRAI
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        US 1998-111173P
        US 1999-142576P
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        US 1999-161653P
                             19991021 (60)
        US 1999-165255P
                             19991112 (60)
DT
       Utility
       APPLICATION
FS
LN.CNT 5072
        INCLM: 435/069.100
INCL
        INCLS: 435/320.100; 435/325.000; 530/399.000; 536/023.500
NCL
               435/069.100
       NCLM:
       NCLS:
               435/320.100; 435/325.000; 530/399.000; 536/023.500
IC
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        ICM: C07K014-475
       ICS: C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L4
     ANSWER 21 OF 86 USPATFULL ON STN
AN
       2002:157101 USPATFULL
TT
       Snake venom polypeptide zsnk1
IN
       Sheppard, Paul O., Granite Falls, WA, UNITED STATES
PΙ
                                 20020627
       US 2002081700
                            Α1
                                  20010807 (9)
ΑI
       us 2001-923995
                            Α1
PRAI
       US 2000-223164P
                             20000807 (60)
DT
       Utility
FS
       APPLICATION
       3778
LN.CNT
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INCL
       INCLS: 435/325.000; 536/023.200; 435/226.000; 435/320.100
NCL
               435/200.000
       NCLM:
       NCLS:
               435/325.000; 536/023.200; 435/226.000; 435/320.100
IC
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       ICM: C12N009-24
       ICS: C12N009-64; C07H021-04
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L4
     ANSWER 22 OF 86 USPATFULL on STN
ΑN
       2002:332816 USPATFULL
TI
       Growth factor homolog ZVEGF4
       Gilbert, Teresa, Seattle, WA, United States
Hart, Charles E., Woodinville, WA, United States
IN
       Sheppard, Paul O., Granite Falls, WA, United States
       Gilbertson, Debra G., Seattle, WA, United States
PA
       ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)
ΡI
       us 6495668
                            в1
                                  20021217
       US 2000-564595
ΑI
                                  20000503 (9)
PRAI
       US 1999-132250P
                             19990503 (60)
       US 1999-164463P
                             19991110 (60)
       US 2000-180169P
                             20000204 (60)
DT
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FS
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INCL
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NCL
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                530/399.000
        NCLS:
                435/069.400; 435/070.100; 530/350.000; 536/023.400
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        ICM: A61k038-24
        ICS: A61K038-27; C12N015-09; C07H021-04
435/69.4; 435/375; 435/377; 514/2; 530/350; 530/402; 530/387.1; 530/399
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L4
      ANSWER 23 OF 86 USPATFULL on STN
        2002:201870 USPATFULL
ΑN
TI
        Growth factor homolog ZVEGF3
IN
        Gao, Zeren, Redmond, WA, United States
        Hart, Charles E., Woodinville, WA, United States
        Piddington, Christopher S., Thousand Oaks, CA, United States
        Sheppard, Paul O., Granite Falls, WA, United States
        Shoemaker, Kimberly E., Bellevue, WA, United States
        Gilbertson, Debra G., Seattle, WA, United States West, James W., Seattle, WA, United States
        ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)
PA
PΙ
        US 6432673
                             В1
                                   20020813
        us 1999-457066
ΑI
                                   19991207 (9)
        US 1998-111173P
                               19981207 (60)
PRAI
                              19990706 (60)
        US 1999-142576P
        US 1999-161653P
                               19991021 (60)
        US 1999-165255P
                              19991112 (60)
DT
        Utility
FS
        GRANTED
LN.CNT 4888
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        INCLS: 435/069.500; 435/006.000; 435/320.100; 435/325.000; 530/351.000;
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                435/069.100
NCL
        NCLM:
        NCLS:
                435/006.000; 435/069.500; 435/320.100; 435/325.000; 530/351.000;
                530/399.000
IC
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        435/69.1; 435/69.5; 435/325; 530/351; 530/399
FXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 24 OF 86 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
     2002:139322 BIOSIS
     PREV200200139322
DN
ΤI
     Doing (F/L)PPPPs: EVH1 domains and their proline-rich partners in cell
     polarity and migration.
     Renfranz, Patricia J. [Reprint author]; Beckerle, Mary C. [Reprint author]
ΑIJ
CS
     Department of Biology and Huntsman Cancer Institute, University of Utah,
     2000 East Circle of Hope, Salt Lake City, UT, 84112-5550, USA
     mary.beckerle@hci.utah.edu
     Current Opinion in Cell Biology, (February, 2002) Vol. 14, No. 1, pp.
SO
     88-103. print.
     CODEN: COCBE3. ISSN: 0955-0674.
DT
     Article
     General Review; (Literature Review)
     English
     Entered STN: 6 Feb 2002
ED
     Last Updated on STN: 26 Feb 2002
     ANSWER 25 OF 86 CAPLUS COPYRIGHT 2004 ACS on STN
     2001:545736 CAPLUS
ΑN
DN
     135:148242
ΤI
     Human polypeptides and their encoding cDNA sequences and antibodies
     Ruben, Steven M.; Shi, Yanggu
Human Genome Sciences, Inc., USA
IN
PΑ
     PCT Int. Appl., 339 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                               DATE
                                                APPLICATION NO.
                                                                    DATE
     wo 2001053343
                               20010726
PΙ
                                                WO 2001-US1436
                                                                    20010117
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              AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
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LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
           SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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               AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
      JP 2003532383
                                 20031105
                          Т2
                                                  JP 2001-553815
                                                                     20010117
 PRAI US 2000-176307P
                                 20000118
                           Ρ
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                                 20010117
RE.CNT 1
                THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
                ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
      ANSWER 26 OF 86 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
      DUPLICATE 5
      2001:169696 BIOSIS
      PREV200100169696
DN
      Defining brain wiring patterns and mechanisms through gene trapping in
TI
      Leighton, Philip A.; Mitchell, Kevin J.; Goodrich, Lisa V.; Lu, Xiaowei;
Pinson, Kathy; Scherz, Paul; Skarnes, William C.; Tessier-Lavigne, Marc
      [Reprint author]
CS
      Departments of Anatomy and of Biochemistry and Biophysics, Howard Hughes
      Medical Institute, University of California, San Francisco, CA,
      94143-0452, USA
      marctl@itsa.ucsf.edu
S0
      Nature (London), (8 March, 2001) Vol. 410, No. 6825, pp. 174-179. print.
      CODEN: NATUAS. ISSN: 0028-0836.
DT
      Article
      Enalish
LA
ED
      Entered STN: 4 Apr 2001
      Last Updated on STN: 18 Feb 2002
L4
       ANSWER 27 OF 86 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
       2000-10590 BIOTECHDS
ΑN
TI
       Nucleic acid coding for human
                                            ***semaphorin*** - ***6A*** -
       used as diagnostic agent, therapeutic agent, for modulating immune
       system, in gene therapy or for effecting differentiation, cytoskeletal
       stabilization and/or plasticity;
           plasmid-mediated recombinant protein gene transfer
ΑU
       Behl C; Klostermann A
       Max-Planck-Soc.
PA
LO
       Munich, Germany.
       WO 2000031252 2 Jun 2000
WO 1999-EP9215 26 Nov 1999
PΙ
AΤ
PRAI
       EP 1998-122441 26 Nov 1998
DT
       Patent
       English
1 A
os
       WPĪ: 2000-400065 [34]
      ANSWER 28 OF 86 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
      DUPLICATE 7
AN
      2001:61173 BIOSIS
      PREV200100061173
DN
TI
      The orthologous human and murine
                                              ***semaphorin***
                                                                      ***6A***
                   proteins (SEMA6A-1/Sema6A-1) bind to the enabled/vasodilator-
      stimulated phosphoprotein-like protein (EVL) via a novel carboxyl-terminal
      zyxin-like domain.
ΑU
      Klostermann, Andreas; Lutz, Beat; Gertler, Frank; Behl, Christian [Reprint
      author]
CS
      Independent Research Group Neurodegeneration, MPI of Psychiatry,
      Kraepelinstrasse 2, 80804, Munich, Germany
      chris@mpipsykl.mpg.de
      Journal of Biological Chemistry, (December 15, 2000) Vol. 275, No. 50, pp.
SO.
      39647-39653. print.
      CODEN: JBCHA3. ISSN: 0021-9258.
DT
      Article
      English
LA
     Genbank-AF28866
05
ED
     Entered STN: 31 Jan 2001
      Last Updated on STN: 15 Feb 2002
L4
     ANSWER 29 OF 86 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
     DUPLICATE 8
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AN
       2000:261050 BIOSIS
 DN
       PREV200000261050
 TI
       The transmembrane protein
                                     ***Semaphorin***
                                                            ***6A***
                                                                        repels
       embryonic sympathetic axons.
      Xu, Xiao-Mei; Fisher, Daniel A.; Zhou, Lijuan; White, Fletcher A.; Ng,
       Sheldon; Snider, William D.; Luo, Yuling [Reprint author]
       Exelixis Pharmaceuticals, Inc., 260 Littlefield Avenue, South San
       Francisco, CA, 94080, USÁ
Journal of Neuroscience, (April 1, 2000) Vol. 20, No. 7, pp. 2638-2648.
       print.
       CODEN: JNRSDS. ISSN: 0270-6474.
 DT
      Article
      English
 IΑ
      Entered STN: 21 Jun 2000
 ED
      Last Updated on STN: 5 Jan 2002
 L4
      ANSWER 30 OF 86
                            MEDLINE on STN
 AN
      1999160821
                       MEDLINE
 DN
      PubMed ID: 10049528
      Cloning and characterization of a novel class VI semaphorin, semaphorin Y.
 TI
      Kikuchi K; Chedotal A; Hanafusa H; Ujimasa Y; de Castro F; Goodman C S;
 ΑU
      Kimura T
      Sumitomo Pharmaceuticals Research Center, 3-1-98, Kasugade-Naka, Konohana,
 CS
      osaka, 554-0022, Japan.
      Molecular and cellular neurosciences, (1999 Jan) 13 (1) 9-23.
 SO
      Journal code: 9100095. ISSN: 1044-7431.
      United States
 DT
      Journal; Article; (JOURNAL ARTICLE)
      English
 LA
      Priority Journals
 FS
      GENBANK-AB000817; GENBANK-AB013729; GENBANK-AB014074
 os
 EΜ
      199904
 ED
      Entered STN: 19990426
      Last Updated on STN: 19990426
      Entered Medline: 19990415
      ANSWER 31 OF 86 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
L4
      DUPLICATE 9
      1999:59333 BIOSIS
AN
DN
      PREV199900059333
ΤI
      Semaphorins_III and IV repel hippocampal axons via two distinct receptors.
      Chedotal, Alain [Reprint author]; Del Rio, Jose A.; Ruiz, Monica; He, Zhigang; Borrell, Victor; De Castro, Fernando; Ezan, Frederic; Goodman,
ΑU
      Corey S.; Tessier-Lavigne, Marc; Sotelo, Constantino; Soriano, Eduardo INSERM U106, Hop. Salpetriere, 75013 Paris, France
CS
SO
      Development (Cambridge), (Nov., 1998) Vol. 125, No. 21, pp. 4313-4323.
      CODEN: DEVPED. ISSN: 0950-1991.
DT
      Article
      English
LA
ED
      Entered STN: 16 Feb 1999
      Last Updated on STN: 16 Feb 1999
      ANSWER 32 OF 86 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
14
      1999:49302 BIOSIS
AN
DN
      PREV199900049302
      Transmembrane protein
TI
                                ***semaphorin***
                                                       ***VIa***
                                                                    is repulsive for
      axons of embryonic sympathetic neurons.
     Xu, X._M. [Reprint author]; Fisher, D. A.; Zhou, L.; Ng, S. [Reprint
ΑU
     author]; White, F. A.; Snider, W. D.; Luo, Y. [Reprint author]
      Exelixis Pharm. Inc., 260 Littlefield Ave., South San Francisco, CA 94080.
CS
SO
     Society for Neuroscience Abstracts, (1998) Vol. 24, No. 1-2, pp. 539.
     Meeting Info.: 28th Annual Meeting of the Society for Neuroscience, Part
      1. Los Angeles, California, USA. November 7-12, 1998. Society for
     Neuroscience.
     ISSN: 0190-5295.
     Conference; (Meeting)
DT
     Conference; Abstract; (Meeting Abstract)
Conference; (Meeting Poster)
     English
LA
ED
     Entered STN: 10 Feb 1999
     Last Updated on STN: 10 Feb 1999
L4
     ANSWER 33 OF 86 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 10
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```
1997:373464 CAPLUS
AN
DN
      127:106980
      Cloning and expression of a novel murine semaphorin with structural
TI
      similarity to insect semaphorin I
      Zhou, L.; White, F. A.; Lentz, S. I.; Wright, D. E.
ΑU
CS
      Center Study Nervous System Injury, Dep. Neurology, Washington Univ.. St.
      Louis, MO, 63110, USA
      Molecular and Cellular Neuroscience (1997), 9(1), 26-41
SO
      CODEN: MOCNED; ISSN: 1044-7431
PB
      Academic
      Journal
DT
      English
LA
       ANSWER 34 OF 86 DGENE COPYRIGHT 2004 THOMSON DERWENT ON STN
L4
       AAG79413 Protein
ΑN
                                 DGENE
       New human cell adhesion proteins (CADHP) useful for treating, diagnosing
TI
       and preventing diseases or conditions associated with the aberrant CADHP
       expression e.g. cancer, acquired immunodeficiency syndrome, Alzheimer's
       disease and epilepsy
       Duggan B M; Xu Y; Lee E A; Lee S; Lu D A M; Warren B A; Yue H; Gietzen K J; Honchell C D; Burford N; Baughn M R; Tang T Y; Hillman J L; Gandhi A
ΙN
       R; Kallick D A; Bandman O; Graul R C; Walia N K; Lu Y; Ramkumar J; Yao M
       G; Lal PG
                    INCYTE GENOMICS INC.
PA
       (INCY-N)
       WO 2002059312 A2 20020801
PΙ
                                                  149p
ΑI
       WO 2001-US49206
                        20011218
PRAI
       US 2000-256542P
                         20001218
       US 2000-259604P
                        20001222
       US 2001-260101P 20010105
DT
       Patent
LA
       English
       2002-590826 [63]
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CR
DESC
      CADHP-2, Incyte ID No: 7596315CD1.
       ANSWER 35 OF 86 DGENE COPYRIGHT 2004 THOMSON DERWENT ON STN
L4
      ABB11205 peptide
ΑN
                                 DGENE
       Human proteins and DNA encoding sequences useful for preventing, treating
TT
       or ameliorating a medical condition in a mammalian subject e.g. arthritis
       and cancer
IN
       Tang Y T; Liu C; Drmanac R T
PA
       (HYSE-N)
                   HYSEQ INC.
PΙ
      WO 2001057188 A2 20010809
                                                  999p
ΑI
      WO 2001-US3800
                         20010205
PRAI
      US 2000-496914
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      US 2000-560875
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DT
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os
      2001-457740 [49]
CR
      N-PSDB: ABA08449
               ***semaphorin***
DESC
      Human
                                      ***Via***
                                                   homologue, SEQ ID NO:1575.
L4
      ANSWER 36 OF 86 DGENE COPYRIGHT 2004 THOMSON DERWENT ON STN
      AAB82595 Protein
AN
                                DGENE
TI
      Nucleic acid molecules encoding human secreted proteins, used in
      preventing, treating or ameliorating a disorder, e.g. Alzheimer's
      diseases and cancers -
IN
      Ruben S M; Shi Y
PA
      (HUMA-N)
                   HUMAN GENOME SCI INC.
      WO 2001053343 A1 20010726
PΙ
                                                  339p
      WO 2001-US1436
ΑI
                         20010117
PRAI
      US 2000-176307
                         20000118
DT
      Patent
LA
      English
os
      2001-483137 [52]
      N-PSDB: AAH26247
CR
DESC
      Human secreted protein encoded by cDNA clone HE8QT72.
L4
      ANSWER 37 OF 86 DGENE COPYRIGHT 2004 THOMSON DERWENT ON STN
ΑN
      AAY71461 peptide
                                DGENE
TI
      Nucleic acid coding for human
                                        ***semaphorin***
                                                               ***6A***
      used as diagnostic agent, therapeutic agent, for modulating immune system, in gene therapy or for effecting differentiation, cytoskeletal
      stabilization and/or plasticity -
ΙN
      Behl C; Klostermann A
```

MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.

PA

(PLAC)

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PΙ
       WO 2000031252 A1 20000602
                                                   53p
 ΑI
       WO 1999-EP9215
                         19991126
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       EP 1998-122441
                         19981126
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 LA
       English
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 CR
       N-PSDB: AAD01234
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       ANSWER 38 OF 86 DGENE COPYRIGHT 2004 THOMSON DERWENT ON STN
 L4
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 AN
                                DGENE
 TI
       Nucleic acid coding for human
                                         ***semaphorin***
                                                               ***6A*** - ***1***
       used as diagnostic agent, therapeutic agent, for modulating immune system, in gene therapy or for effecting differentiation, cytoskeletal
       stabilization and/or plasticity -
 ΙN
       Behl C; Klostermann A
 PA
       (PLAC)
                   MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
       WO 2000031252 A1 20000602
PΙ
       WO 1999-EP9215
ΑI
                         19991126
       EP 1998-122441
PRAI
                         19981126
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LA
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CR
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DESC
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L4
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AN
                             DGENE
      New human cell adhesion proteins (CADHP) useful for treating, diagnosing
TI
       and preventing diseases or conditions associated with the aberrant CADHP
       expression e.g. cancer, acquired immunodeficiency syndrome, Alzheimer's
       disease and epilepsy
IN
      Duggan B M; Xu Y; Lee E A; Lee S; Lu D A M; Warren B A; Yue H; Gietzen K
       J; Honchell C D; Burford N; Baughn M R; Tang T Y; Hillman J L; Gandhi A
      R; Kallick D A; Bandman O; Graul R C; Walia N K; Lu Y; Ramkumar J; Yao M
PA
       (INCY-N)
                   INCYTE GENOMICS INC.
      WO 2002059312 A2 20020801
PΙ
                                                 149p
ΑI
       wo 2001-us49206
                        20011218
PRAI
      US 2000-256542P
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       US 2000-259604P
                         20001222
       US 2001-260101P
                        20010105
DT
       Patent
       English
LA
os
       2002-590826 [63]
CR
       P-PSDB: AAG79413
DESC
      CADHP-2 coding sequence, Incyte ID No: 7596315CB1.
L4
      ANSWER 40 OF 86 DGENE COPYRIGHT 2004 THOMSON DERWENT ON STN
AN
      ABA08449 CDNA
                             DGENE
      Human proteins and DNA encoding sequences useful for preventing, treating
TI
      or ameliorating a medical condition in a mammalian subject e.g. arthritis
      and cancer
      Tang Y T; Liu C; Drmanac R T
IN
PA
                   HYSEQ INC.
       (HYSE-N)
      WO 2001057188 A2 20010809
PΙ
                                                 999p
      WO 2001-US3800
ΑI
                        20010205
PRAI
      US 2000-496914
                        20000203
      US 2000-560875
                        20000427
DT
      Patent
LA
      English
OS.
      2001-457740 [49]
CR
      P-PSDB: ABB11205
DESC
               ***semaphorin***
      Human
                                     ***Via***
                                                 homologue-encoding cDNA, SEQ ID
      NO:225.
L4
      ANSWER 41 OF 86 DGENE COPYRIGHT 2004 THOMSON DERWENT ON STN
ΑN
      AAH26247 CDNA
                            DGENE
      Nucleic acid molecules encoding human secreted proteins, used in
TI
      preventing, treating or ameliorating a disorder, e.g. Alzheimer's
      diseases and cancers -
IN
      Ruben S M; Shi Y
PA
      (HUMA-N)
                   HUMAN GENOME SCI INC.
ΡI
      WO 2001053343 A1 20010726
                                                339p
      WO 2001-US1436
ΑI
                        20010117
PRAI
      US 2000-176307
                        20000118
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DT
       Patent
LA
       English
       2001-483137 [52]
os
CR
       P-PSDB: AAB82595
DESC
      Human secreted protein cDNA clone HE80T72.
      ANSWER 42 OF 86 DGENE COPYRIGHT 2004 THOMSON DERWENT ON STN
      AAD01234 DNA
AN
                           DGENE
                                        ***semaphorin***
TI
      Nucleic acid coding for human
                                                              ***6A***
       used as diagnostic agent, therapeutic agent, for modulating immune
      system, in gene therapy or for effecting differentiation, cytoskeletal
      stabilization and/or plasticity -
ΙN
      Behl C; Klostermann A
PA
       (PLAC)
                   MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
      WO 2000031252 A1 20000602
PΙ
      WO 1999-EP9215
ΑI
                        19991126
PRAI
      EP 1998-122441
                        19981126
DT
      Patent
      English
LA
os
      2000-400065 [34]
CR
      P-PSDB: AAY71461
DESC
      DNA encoding binding domain of human
                                               ***semaphorin***
                                                                      ***6A*** -
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L4
      ANSWER 43 OF 86 DGENE COPYRIGHT 2004 THOMSON DERWENT ON STN
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                           DGENE
TI
                                        ***semaphorin***
      Nucleic acid coding for human
                                                              ***6A***
                                                                        - ***1***
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      system, in gene therapy or for effecting differentiation, cytoskeletal
      stabilization and/or plasticity -
ΤN
      Behl C; Klostermann A
PΑ
      (PLAC)
                   MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
      WO 2000031252 A1 20000602
PI
      WO 1999-EP9215
ΑI
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PRAI
      EP 1998-122441
                        19981126
DT
      Patent
      English
IA
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      2000-400065 [34]
      P-PSDB: AAY71460
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               ***semaphorin***
DESC
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L4
     ANSWER 44 OF 86
                           GENBANK.RTM. COPYRIGHT 2004 on STN
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LOCUS (LOC):
                                       GenBank (R)
GenBank ACC. No. (GBN): CF132761
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COMMENT:
     Contact: Soula, C.
     Centre de Biologie du Developpement, UMR 5547 CNRS/UPS
     Universite Paul Sabatier, 118 route de Narbonne, 31062 Toulouse
     cedex, France
     Tel:
          33 5 61 55 64 23
     Fax: 33 5 61 55 65 07
     Email: soulz@cict.fr
     POLYA=No.
REFERENCE:
                           (bases 1 to 536)
  AUTHOR (AU):
                         Braquart-Varnier, C.; Clouscard-Martinato, C.; Agius, E.;
                         Escalas, N.; Danesin, C.; Benazeraf, B.; Cochard, P.;
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  TITLE (TI):
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LOCUS (LOC):
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COMMENT:
      Contact: MGC help desk
      Email: cgapbs-r@mail.nih.gov
      Tissue Procurement: Dr. James Lin, University of Iowa
      CDNA Library Preparation: M. Bento Soares, University of Iowa
      CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
      DNA Sequencing by: University of Iowa, Dr. M. Bento Soares and Dr.
     Thomas L. Casavant.
Web site: http://genome.uiowa.edu
      Contact: bento-soares@uiowa.edu; tom-casavant@uiowa.edu
     Bonaldo, M.F., Akabogu, I., Bair, T., Bair, J., Crouch, K., Davis, A., Fishler, K., Keppel, C., Kucaba, T., Lebeck, M., Melo, A., Schaefer, K., Scheetz, T., Smith, C., Snir, E., Tack, D., Trout, K., Walters, J.,
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   TITLE (TI):
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                          Office, National Cancer Institute, 31 Center Drive,
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COMMENT:
      Contact: MGC help desk
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      Center, Stanford University School of Medicine, Stanford, CA 94305
                            http://www-shgc.stanford.edu
      Web site:
      Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
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    AUTHOR (AU):
                                Diatchénkó, L.; Márusina, K.; Fármer, Á.A.; Rubin, G.M.;
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COMMENT:
      cDNA library was prepared and sequenced in Mouse Genome
      Encyclopedia Project of Genome Exploration Research Group in Riken
      Genomic Sciences Center and Genome Science Laboratory in RIKEN.
      Division of Experimental Animal Research in Riken contributed to
      prepare mouse tissues.
      Please visit our web site for further details.
      URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
REFERENCE:
                              Carninci, P.; Hayashizaki, Y.
   AUTHOR (AU):
   TITLE (TI):
                              High-efficiency full-length cDNA cloning
   JOURNAL (SO):
                              Meth. Enzymol., 303, 19-44 (1999)
   OTHER SOURCE (OS):
                              CA 131:318304
REFERENCE:
                              Carninci,P.; Shibata,Y.; Hayatsu,N.; Sugahara,Y.; Shibata,K.; Itoh,M.; Konno,H.; Okazaki,Y.;
   AUTHOR (AU):
                              Muramatsu, M.; Hayashizaki, Y.
   TITLE (TI):
                              Normalization and subtraction of cap-trapper-selected
                              cDNAs to prepare full-length cDNA libraries for rapid
                              discovery of new genes
                              Genome Res., 10 (10), 1617-1630 (2000)
   JOURNAL (SO):
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   OTHER SOURCE (OS):
REFERENCE:
   AUTHOR (AU):
                              Shibata,K.; Itoh,M.; Aizawa,K.; Nagaoka,S.; Sasaki,N.;
                              Carninci,P.; Konno,H.; Akiyama,J.; Nishi,K.;
Kitsunai,T.; Tashiro,H.; Itoh,M.; Sumi,N.; Ishii,Y.;
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Yamamoto,R.; Matsumoto,H.; Sakaguchi,S.; Ikegami,T.;
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   TITLE (TI):
                              RIKEN integrated sequence analysis (RISA)
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                              Genome Res., 10 (11), 1757-1771 (2000)
   JOURNAL (SO):
REFERENCE:
   AUTHOR (AU):
                              The RIKEN Genome Exploration Research Group Phase II
                              Team; the FANTOM Consortium.
   TITLE (TI):
                              Functional annotation of a full-length mouse cDNA
                              collection
                              Nature, 409, 685-690 (2001)
   JOURNAL (SO):
   OTHER SOURCE (OS):
                              CA 134:203311
REFERENCE:
   AUTHOR (AU):
                              The FANTOM Consortium; the RIKEN Genome Exploration
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Research Group Phase I & II Team.

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Analysis of the mouse transcriptome based on functional
   TITLE (TI):
                                annotation of 60,770 full-length cDNAs
   JOURNAL (SO):
                                Nature, 420, 563-573 (2002)
   OTHER SOURCE (OS):
                                CA 138:131939
REFERENCE:
                                   (bases 1 to 3329)
                                Adachi, J.; Aizawa, K.; Akimura, T.; Arakawa, T.; Bono, H.; Carninci, P.; Fukuda, S.; Furuno, M.; Hanagaki, T.; Hara, A.; Hashizume, W.; Hayashida, K.; Hayatsu, N.;
   AUTHOR (AU):
                                Hiramoto, K.; Hiraoka, T.; Hirozane, T.; Hori, F.;
                                Imotani,K.; Ishii,Y.; Itoh,M.; Kagawa,I.; Kasukawa,T.;
                                Katoh, H.; Kawai, J.; Kojima, Y.; Kondo, S.; Konno, H.;
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   TITLE (TI):
                                Direct Submission
   JOURNAL (SO):
                                Submitted (16-APR-2002) Yoshihide Hayashizaki, The
                                Institute of Physical and Chemical Research (RIKEN),
                                Laboratory for Genome Exploration Research Group, RÍKEN
                                Genomic Sciences Center (GSC), RIKEN Yokohama
Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
Kanagawa 230-0045, Japan (E-mail:genome-
res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/,
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MOLECULE TYPE (CI): DIVISION CODE (CI):

mRNA; linear High-Throughput CDNA Sequencing

DATE (DATE): 3 Apr 2004 **DEFINITION (DEF):** 

Mus musculus 13 days embryo heart cDNA, RIKEN full-length enriched library, clone:D330011G23 product:weakly similar to \*\*\*SEMAPHORIN\*\*\* product:weakly similar to

\*\*\*6A\*\*\* PRECURSOR ( \*\*\*SEMAPHORIN\*\*\* \*\*\*VIA\*\*\* (SEMA VIA) (SEMAPHORIN Q) (SEMA Q) [Mus musculus],

full insert sequence. HTC; CAP trapper

KEYWORDS (ST): SOURCE:

Mus musculus (house mouse)

ORGANISM (ORGN): Mus musculus

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                            Euteleostomi; Mammalia; Eutheria; Rodentia;
Sciurognathi; Muridae; Murinae; Mus
COMMENT:
      cDNA library was prepared and sequenced in Mouse Genome
      Encyclopedia Project of Genome Exploration Research Group in Riken
      Genomic Sciences Center and Genome Science Laboratory in RIKEN.
      Division of Experimental Animal Research in Riken contributed to
      prepare mouse tissues.
      Please visit our web site for further details.
      URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
REFERENCE:
   AUTHOR (AU): TITLE (TI):
                            Carninci, P.; Hayashizaki, Y.
                            High-efficiency full-length cDNA cloning
Meth. Enzymol., 303, 19-44 (1999)
   JOURNAL (SO):
   OTHER SOURCE (OS):
                            CA 131:318304
REFERENCE:
   AUTHOR (AU):
                            Carninci,P.; Shibata,Y.; Hayatsu,N.; Sugahara,Y.;
                            Shibata,K.; Itoh,M.; Konno,H.; Okazaki,Ÿ.;
                            Muramatsu, M.; Hayashizaki, Y.
   TITLE (TI):
                            Normalization and subtraction of cap-trapper-selected
                            cDNAs to prepare full-length cDNA libraries for rapid
                            discovery of new genes
Genome Res., 10 (10), 1617-1630 (2000)
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REFERENCE:
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   TITLE (TI):
                            RIKEN integrated sequence analysis (RISA)
                            system--384-format sequencing pipeline with 384
                            multicapillary sequencer
   JOURNAL (SO):
                            Genome Res., 10 (11), 1757-1771 (2000)
REFERENCE:
   AUTHOR (AU):
                            The RIKEN Genome Exploration Research Group Phase II
                            Team; the FANTOM Consortium.
   TITLE (TI):
                            Functional annotation of a full-length mouse cDNA
                            collection
                            Nature, 409, 685-690 (2001)
   JOURNAL (SO):
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   TITLE (TI):
                            Analysis of the mouse transcriptome based on functional
                            annotation of 60,770 full-length cDNAs
                            Nature, 420, 563-573 (2002)
CA 138:131939
   JOURNAL (SO):
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REFERENCE:
                                (bases 1 to 4476)
   AUTHOR (AU):
                            Adachi, J.; Aizawa, K.; Akimura, T.; Arakawa, T.; Bono, H.;
                            Carninci, P.; Fukuda, S.; Furuno, M.; Hanagaki, T.;
                            Hara, A.; Hashizume, W.; Hayashida, K.; Hayatsu, N.;
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                            Hayashizaki,Y.
   TITLE (TI):
                            Direct Submission
   JOURNAL (SO):
                            Submitted (16-JUL-2001) Yoshihide Hayashizaki, The
                            Institute of Physical and Chemical Research (RIKEN)
                            Laboratory for Genome Exploration Research Group, RIKEN
                            Genomic Sciences Center (GSC), RIKEN Yokohama
```

Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/,

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Kanagawa 230-0045, Japan (E-mail:genome-
                         Tel:81-45-503-9222, Fax:81-45-503-9216)
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## ANSWER 49 OF 86 GENBANK.RTM. COPYRIGHT 2004 on STN

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DIVISION CODE (CI):
DATE (DATE):
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High-Throughput CDNA Sequencing 3 Apr 2004

**DEFINITION (DEF):** Mus musculus 7 days neonate cerebellum cDNA, RIKEN full-length enriched library, clone:A730020P05 product:sema domain, transmembrane domain (TM), and cytoplasmic domain, ( \*\*\*semaphorin\*\*\* ) \*\*\*6A\*\*\*

full insert sequence.

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KEYWORDS (ST):
                         HTC; CAP trapper
SOURCE:
                         Mus musculus (house mouse)
ORGANISM (ORGN):
                         Mus musculus
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;

Euteleostómi; Mammália; Euthéria; Rodentia; Sciurognathi; Muridae; Murinae; Mus

cDNA library was prepared and sequenced in Mouse Genome Encyclopedia project of Genome Exploration Research Group in Riken

```
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
      Division of Experimental Animal Research in Riken contributed to
      prepare mouse tissues.
      Please visit our web site for further details.
      URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
REFERENCE:
                              Carninci, P.; Hayashizaki, Y.
    AUTHOR (AU):
                              High-efficiency full-length cDNA cloning
    TITLE (TI):
    JOURNAL (SO):
                              Meth. Enzymol., 303, 19-44 (1999)
    OTHER SOURCE (OS):
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Muramatsu,M.; Hayashizaki,Y.
    TITLE (TI):
                              Normalization and subtraction of cap-trapper-selected
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    TITLE (TI):
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                              system--384-format sequencing pipeline with 384
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Genome Res., 10 (11), 1757-1771 (2000)
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   AUTHOR (AU):
                              The RIKEN Genome Exploration Research Group Phase II
                              Team; the FANTOM Consortium.
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                              Nature, 409, 685-690 (2001)
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   JOURNAL (SO):
                              Institute of Physical and Chemical Research (RIKEN)
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                              Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
                             Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)
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      ANSWER 50 OF 86
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COMMENT:
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      Encyclopedia Project of Genome Exploration Research Group in Riken
      Genomic Sciences Center and Genome Science Laboratory in RIKEN.
      Division of Experimental Animal Research in Riken contributed to
      prepare mouse tissues.
      Please visit our web site for further details.
      URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
REFERENCE:
    AUTHOR (AU):
                              Carninci, P.; Hayashizaki, Y.
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REFERENCE:
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   TITLE (TI):
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     JOURNAL (SO):
REFERENCE:
    AUTHOR (AU):
                                     The RIKEN Genome Exploration Research Group Phase II
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    TITLE (TI):
                                     Functional annotation of a full-length mouse cDNA
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                                     Nature, 409, 685-690 (2001)
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REFERENCE:
    AUTHOR (AU):
                                     The FANTOM Consortium; the RIKEN Genome Exploration
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    TITLE (TI):
                                     Analysis of the mouse transcriptome based on functional
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                                     Nature, 420, 563-573 (2002)
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                                     Adachi, J.; Aizawa, K.; Akimura, T.; Arakawa, T.; Bono, H.; Carninci, P.; Fukuda, S.; Furuno, M.; Hanagaki, T.; Hara, A.; Hashizume, W.; Hayashida, K.; Hayatsu, N.; Hiramoto, K.; Hiraoka, T.; Hori, F.;
    AUTHOR (AU):
                                     Imotani,K.; Ishii,Y.; Itoh,M.; Kagawa,I.; Kasukawa,T.;
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                                     Direct Submission
    TITLE (TI):
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                                     Submitted (16-APR-2002) Yoshihide Hayashizaki, The
                                     Institute of Physical and Chemical Research (RIKEN),
                                     Laboratory for Genome Exploration Research Group, RIKEN
                                    Genomic Sciences Center (GSC), RIKEN Yokohama
Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
Kanagawa 230-0045, Japan (E-mail:genome-
res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/,
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### ANSWER 51 OF 86 GENBANK.RTM. COPYRIGHT 2004 on STN

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High-Throughput CDNA Sequencing

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product:weakly similar to \*\*\*6A\*\*\* PRECURSOR ( \*\*\*SEMAPHORIN\*\*\* \*\*\*VIA\*\*\*

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SOURCE:
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COMMENT:
      cDNA library was prepared and sequenced in Mouse Genome
      Encyclopedia Project of Genome Exploration Research Group in Riken
      Genomic Sciences Center and Genome Science Laboratory in RIKEN.
      Division of Experimental Animal Research in Riken contributed to
      prepare mouse tissues.
      Please visit our web site for further details.
      URL:http://genome.gsc.riken.jp/
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                               Carninci, P.; Hayashizaki, Y.
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                               Normalization and subtraction of cap-trapper-selected
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                               system--384-format sequencing pipeline with 384
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                               The RIKEN Genome Exploration Research Group Phase II
                               Team: the FANTOM Consortium.
    TITLE (TI):
                               Functional annotation of a full-length mouse cDNA
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                               Nature, 409, 685-690 (2001)
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                               The FANTOM Consortium; the RIKEN Genome Exploration Research Group Phase I & II Team.
   AUTHOR (AU):
                               Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
   TITLE (TI):
                               Nature, 420, 563-573 (2002)
CA 138:131939
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   AUTHOR (AU):
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```

TITLE (TI): JOURNAL (SO):

Direct Submission Submitted (16-APR-2002) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN) Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genomeres@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)

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      ANSWER 52 OF 86
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      Division of Experimental Animal Research in Riken contributed to
      prepare mouse tissues.
      Please visit our web site for further details.
      URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
REFERENCE:
   AUTHOR (AU):
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                            High-efficiency full-length cDNA cloning
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                            Normalization and subtraction of cap-trapper-selected
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REFERENCE:
   AUTHOR (AU):
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   TITLE (TI):
                            Functional annotation of a full-length mouse cDNA
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REFERENCE:
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Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

Nature, 420, 563-573 (2002)
     AUTHOR (AU):
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     JOURNAL (SO):
     OTHER SOURCE (OS):
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     TITLE (TI):
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                                        Genomic Sciences Center (GSC), RIKEN Yokohama
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       ANSWER 53 OF 86
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DATE (DATE):
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COMMENT:
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       Genomic Sciences Center and Genome Science Laboratory in RIKEN.
Division of Experimental Animal Research in Riken contributed to
       prepare mouse tissues.
       Please visit our web site for further details.
       URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
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High-efficiency full-length cDNA cloning

Meth. Enzymol., 303, 19-44 (1999)

TITLE (TI):

JOURNAL (SO):

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Muramatsu,M.; Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected
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Genome Res., 10 (10), 1617-1630 (2000)
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    TITLE (TI):
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                                   Nature, 409, 685-690 (2001)
CA 134:203311
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REFERENCE:
                                    The FANTOM Consortium; the RIKEN Genome Exploration Research Group Phase I & II Team.
    AUTHOR (AU):
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CA 138:131939
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                                    Adachi, J.; Aizawa, K.; Akimura, T.; Arakawa, T.; Bono, H.;
    AUTHOR (AU):
                                    Carninci, P.; Fukuda, S.; Furuno, M.; Hanagaki, T.;
                                   Hara,A.; Hashizume,W.; Hayashida,K.; Hayatsu,N.;
Hiramoto,K.; Hiraoka,T.; Hirozane,T.; Hori,F.;
Imotani,K.; Ishii,Y.; Itoh,M.; Kagawa,I.; Kasukawa,T.;
Katoh,H.; Kawai,J.; Kojima,Y.; Kondo,S.; Konno,H.;
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                                    Miyazáki,A.; Múrata,M.; Nakámura,M.; Ńishi,K.;
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                                    Saito,R.; Saitoh,H.; Sakai,C.; Sakai,K.; Sakazume,N.;
                                    Sano, H.; Sasaki, D.; Shibata, K.; Shinagawa, A.; Shiraki, T.; Sogabe, Y.; Tagami, M.; Tagawa, A.; Takahashi, F.; Takaku-Akahira, S.; Takeda, Y.; Tanaka, T.;
                                   Tomaru,A.; Toya,T.; Yasunishi,A.; Muramatsu,M.;
Hayashizaki,Y.
Direct Submission
    TITLE (TI):
    JOURNAL (SO):
                                    Submitted (16-JUL-2001) Yoshihide Hayashizaki, The
                                    Institute of Physical and Chemical Research (RIKEN)
                                    Laboratory for Genome Exploration Research Group, RIKEN
                                    Genomic Sciences Center (GSC), RIKEN Yokohama
                                    Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
                                    Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)
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      ANSWER 54 OF 86
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COMMENT:
      Contact: Stephen L. Johnson
      Washington University School of Medicine
      4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
      Tel: 314 286 1800
      Fax: 314 286 1810
      Email: zbrafish@watson.wustl.edu
      Library materials and construction by Greg Elgar (UK MRC HGMP-RC).
      DNA Sequencing by: Washington University Genome Sequencing Center
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    AUTHOR (AU):
                               Ritter,E.; Kohn,S.; Shin,T.; Jackson,Y.; Cardenas,M.;
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Construction by Greg Elgar (UK

MRC HGMP-RC).

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       Email: cgapbs-r@mail.nih.gov
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       Sequencing Center (NISC),
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       Contact: nisc_mgc@nhgri.nih.gov
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REFERENCE:
    AUTHOR (AU):
                                Strausberg, R.
    TITLE (TI):
                                Direct Submission
                                Submitted (06-JUN-2002) National Institutes of Health,
    JOURNAL (SO):
                                Mammalian Gene Collection (MGC), Cancer Genomics
                                Office, National Cancer Institute, 31 Center Drive,
                                Room 11A03, Bethesda, MD 20892-2590, USA
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  4681 gaaatccatt aactggaata attgagtttc tttattttta caataaattc actgagtaaa
  4741 taagttggag ctggaattet gagetitgtg tttggaetgt etggtetgta getaaaggaa
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  4861 cctataaaca tgcaaaaaaa ctaattcatg ttaaagtcct tccagatcct aatttctaaa
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  5641 ctgggaggag tctccaagcc atgtgcacag cacacacgtg cagtgcacac aaagaaatga
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  6061 aaaagaattc aaaaaaagac tgacaatgac agttttgagt tggatagtga aaaagtggag
  6121 cctccataat cagtgtggtt gccttcagac ctgagtactt agctgagggt gggtgagagc
  6181 cctttgttcc aaaagtccat tagttttgct gttgtttagg agtaggtggt tgttgttgtt
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  6841 agaaaagaaa aaagaaaaga aaaaaaaaa aaaaa
L4
     ANSWER 56 OF 86
                              GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                            BM182435
                                           GenBank (R)
GenBank ACC. NO. (GBN):
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GenBank VERSION (VER):
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CAS REGISTRY NO. (RN):
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SEQUENCE LENGTH (SQL):
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MOLECULE TYPE (CI):
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DIVISION CODE (CI):
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                            11 Dec 2001
DATE (DATE):
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                                                                     PRECURSOR.; contains
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SOURCE:
                            zebrafish.
ORGANISM (ORGN):
                            Danio rerio
                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                            Euteleostomi; Actinopterygii; Neopterygii; Teleostei;
                            Ostariophysi; Cypriniformes; Cyprinidae; Danio
NUCLEIC ACID COUNT (NA): 153 a
                                      141 c
                                                         228 t
                                               195 q
COMMENT:
     Contact: Stephen L. Johnson
     Washington University School of Medicine
     4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
     Tel: 314 286 1800
     Fax: 314 286 1810
     Email: zbrafish@watson.wustl.edu
     Library constructed by Dr. Sumio Sugano and Dr. Koichi Kawakami DNA
     Sequencing by: Washington University Genome Sequencing Center Clone
     distribution information can be found through the I.M.A.G.E.
     Consortium/LLNL, send email to: info@image.llnl.gov
Seq primer: T7 from Gibco
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High quality sequence stop: 463.

REFERENCE:

1 (bases 1 to 717)

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Clark, M.; Johnson, S.L.; Lehrach, H.; Lee, R.; Li, F.; Marra, M.; Eddy, S.y; Hillier, L.; Kucaba, T.; Martin, J.;
    AUTHOR (AU):
                                Beck,C.; Wylie,T.; Underwood,K.; Steptoe,M.;
Theising,B.; Allen,M.; Bowers,Y.; Person,B.;
Swaller,T.; Gibbons,M.; Pape,D.; Harvey,N.; Schurk,R.;
                                Ritter, E.; Kohn, S.; Shin, T.; Jackson, Y.; Cardenas, M.;
                                McCann, R.; Wilson, R.
    TITLE (TI):
                                WashU Zebrafish EST Project 1998
    JOURNAL (SO):
                                Unpublished (1998)
FEATURES (FEAT):
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                        Location
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                                                      /tissue-type="whole body"
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                                                      resistant)"
                                                      /note="Vector: pME18S-FL3; Site-1:
DraIII (CACCATGTG); Site-2: DraIII
                                                      (CACTGTGTG); 1st strand cDNA was
                                                      primed with an oligo(dT) primer
                                                      [ATGTGGCCTTTTTTTTTTTTTTTT];
                                                      double-stranded cDNA was ligated
                                                      to a DraIII adaptor
                                                      [TGTTGGCCTACTGG], digested and
                                                      cloned into distinct DraIII sites of the pME18S-FL3 vector (5' site CACTGTGTG, 3' site CACCATGTG). XhoI should be used to isolate the CDNA insort Size selection was
                                                      cDNA insert. Size selection was
                                                      performed to exclude fragments
                                                      <1.5kb. Library constructed and
                                                      donated by Dr. Sumio Sugano
                                                      (University of Tokyo Institute of
                                                      Medical Science). Custom primers for sequencing: 5' end primer
                                                      CTTCTGCTCTAAAAGCTGCG and 3' end
                                                      primer CGACCTGCAGCTCGAGCACA.
SEQUENCE (SEQ):
       1 ttttttttt ttttttttc aatgaaagaa accagattta ttgacaataa ccaccctcca
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    121 atacacacta tatttacaca ctgcagtcat caatgtgctg gtattctgac ccctgagtgt
    181 gtgggctcag ttgtgtgttt gtttgtgtgt gtcatgtgaa cacatggtca gtagttgtgt
    241 ttgtgtcatg tgatcgcggg gtcagtagtt gtgtgtcgtg atcgcggggt tagtagttgc
    301 atgtgtgtgt tgtgtgacca gtgttgtccc acagggtcaa tagttgtgtg tgtatgccat
   361 gtgactgtgt ggtcaatagt tgtgcgtgta atgtgagcgc gaggtcagta tttttgtgtg
421 tgtgtgtgtg tgtgtgtgt tgtgtgtgtt ggtcaaaatc ttcagcacgc gtccgtcttc
481 agagcccaga aacactacag tgcggttctt atgaggccca gcagcagtgt ccaccacaat
541 ctgagtcagc ttatacctgc tggcggtgtt ggtgatcagc ggttggctgt tgactgacgg
601 cacgctctcc tccatcagcg ggtgtgttt gatgaacgac agcacagagt ctggaaactg
661 aacagaagag gaataggagg aggcagaacc ctcacctgca cacgaaccgt gggttgg
L4
      ANSWER 57 OF 86
                                   GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                                BM180699
                                                  GenBank (R)
GenBank ACC. No. (GBN): BM180699
GenBank VERSION (VER):
                                BM180699.1 GI:17404770
CAS REGISTRY NO. (RN): SEQUENCE LENGTH (SQL):
                                376286-68-9
                                561
MOLECULE TYPE (CI):
                                mRNA; linear
DIVISION CODE (CI):
                                Expressed sequence tag
DATE (DATE):
                                7 Dec 2001
DEFINITION (DEF):
                                daj83c05.y1 NICHD XGC Li1 Xenopus laevis cDNA clone
                                IMAGE:5129457 5' similar to TR:035464 035464
                                   ***SEMAPHORIN***
                                                               ***VIA***
                                                                               PRECURSOR. ;, mRNA
                                sequence.
                                African clawed frog.
Xenopus laevis
SOURCE:
 ORGANISM (ORGN):
                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                                Euteleostomi; Amphibia; Batrachia; Anura;
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Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus
NUCLEIC ACID COUNT (NA): 133 a
                                     126 c
                                               115 g
COMMENT:
      Contact: Robert Strausberg, Ph.D.
      Email: cgapbs-r@mail.nih.gov
      Tissue Procurement: Martha Rebbert, Steven L. Klein, Ph.D.
       cDNA Library Preparation: Life Technologies, Inc.
       cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
       DNA Sequencing by: Washington University Genome Sequencing Center
       Clone distribution: Xenopus clones from this library are available
      through the I.M.A.G.E. Consortium/LLNL at: info@image.llnl.gov
      Seq primer: -40RP from Gibco
      High quality sequence stop: 444.
                              (bases 1 to 561)
REFERENCE:
                            1
                            NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
   AUTHOR (AU):
                           National Cancer Institute, Cancer Genome Anatomy
Project (CGAP), Tumor Gene Index
   TITLE (TI):
   JOURNAL (SO):
                            Unpublished (1997)
FEATURES (FEAT):
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                                              /note="Organ: liver; Vector:
pCMV-SPORT6; Site-1: NotI; Site-2:
                                              SalI; Cloned unidirectionally.
                                              Primer: Oligo dT. Average insert size 1.4 kb. Constructed by Life Technologies. Note: This is a
                                              Xenopus Gene Collection (XGC)
SEQUENCE (SEQ):
      1 gctgcaagcc tcctgcccct ttgctgtgtt ggagatagcg aatgtgcttt tgtctgtgga
     61 aatagaaago taagcagact ttotgaaaat tatatttigo agacaigtga tottocaggg
   121 gatttatage tttgetteaa atggeacatt ettatettee agaacacatg gttetataat 181 gaaattttte ttttgttgge atttettett aaatgatgtt ggeatetteg tateceetag 241 egeateeegg catttttaae etgatacaae aaaacettgt ttttteeet etetaggtgg
   301 ttttcccaag agtcgcccag gtgtgcaaaa atgacatggg gggatctcag agggtacttg 361 aaaaacagtg gacatctttc ctaaaagctc gactgaattg ctcggttcct ggggattccc 421 atttctattt caacattttg caagctgtta cagacgtcat tcatatcaat ggccgagacg
   481 ttgtcttggc tactttttca acaccgtaca acagcatccc cggctctgct gtttgtgcct
   541 atgatatggc tgacatcgct a
L4
     ANSWER 58 OF 86
                              GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                            BG816002
                                          GenBank (R)
GenBank ACC. NO. (GBN): BG816002
GenBank VERSION (VER):
                            BG816002.1 GI:14186982
CAS REGISTRY NO. (RN):
                            338672-75-6
SEQUENCE LENGTH (SQL):
                            589
MOLECULE TYPE (CI):
                            mRNA; linear
DIVISION CODE (CI):
                            Expressed sequence tag
DATE (DATE):
DEFINITION (DEF):
                            dad39a04.y1 Wellcome CRC pCS107 tropicalis St10-12
                            Silurana tropicalis cDNA clone IMAGE:4461607 5' similar
                            to TR:035464 035464
                                                    ***SEMAPHORIN*** ***VIA***
                            PRECURSOR.;, mRNA sequence.
SOURCE:
                            western clawed frog.
 ORGANISM (ORGN):
                            Silurana tropicalis
                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                            Euteleostomi; Amphibia; Batrachia; Anura;
                            Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Silurana
NUCLEIC ACID COUNT (NA): 154 a
                                      125 c
                                               145 g
                                                         165 t
COMMENT:
      Contact: Sandy Clifton, Ph.D.
     WashU Xenopus EST project, 1999
     Washington University School of Medicine
      4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
      Tel: 314 286 1800
      Fax: 314 286 1810
```

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Library constructed by A. Zorn and J. Mason (Wellcome/CRC Institute
      ). DNA Sequencing by: Washington University Genome Sequencing
      Center
       Clone distribution: Xenopus clones from this library are available
      through the I.M.A.G.E. Consortium/LLNL at: info@image.llnl.gov
      High quality sequence stop: 513.
REFERENCE:
                                 (bases 1 to 589)
                              Clifton, S.; Johnson, S.L.; Blumberg, B.; Song, J.;
    AUTHOR (AU):
                              Hillier,L.; Pape,D., Martin,J.; Wylie,T.;
                              Underwood,K.; Theising,B.; Bowers,Y.; Person,B.M;
                              Gibbons, M.; Harvey, N.; Ritter, E.; Jackson, Y.; McCann, R.; Waterston, R.; Wilson, R.
                              WashU Xenopus EST project, 1999
Unpublished (1999)
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    JOURNAL (SO):
FEATURES (FEAT):
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                                                  Mason (Wellcome/CRC Institute). "
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      ANSWER 59 OF 86
                                GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                              AK027867
                                              GenBank (R)
GenBank ACC. NO. (GBN): AK027867
GenBank VERSION (VER):
                              AK027867.1 GI:14042853
CAS REGISTRY NO. (RN):
SEQUENCE LENGTH (SQL):
MOLECULE TYPE (CI):
                              390638-15-0
                              6060
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DIVISION CODE (CI):
                              Primates
DATE (DATE):
                              30 Jan 2004
DEFINITION (DEF):
                              Homo sapiens cDNA FLJ14961 fis, clone PLACE4000230,
                              highly similar to Mus musculus
                                                                       ***semaphorin***
                                 ***VIa***
                                               mRNA.
KEYWORDS (ST):
                              oligo capping; fis (full insert sequence)
SOURCE:
                              Homo sapiens (human)
 ORGANISM (ORGN):
                              Homo sapiens
                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
                              Hominidae; Homo
COMMENT:
      NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing:
      Research Association for Biotechnology; cDNA library construction, 5'- & 3'-end one pass sequencing and clone selection: Helix Research Institute (supported by Japan Key Technology Center etc.) and Department of Virology, Institute of Medical Science,
      University of Tokyo.
```

Email: est@watson.wustl.edu

REFERENCE:

```
Ota,T.; Suzuki,Y.; Nishikawa,T.; Otsuki,T.;
     AUTHOR (AU):
                                   Ota, I.; Suzuki, Y.; Nisnikawa, I.; Otsuki, I.;
Sugiyama, T.; Irie, R.; Wakamatsu, A.; Hayashi, K.;
Sato, H.; Nagai, K.; Kimura, K.; Makita, H.; Sekine, M.;
Obayashi, M.; Nishi, T.; Shibahara, T.; Tanaka, T.;
Ishii, S.; Yamamoto, J.; Saito, K.; Kawai, Y.; Isono, Y.;
Nakamura, Y.; Nagahari, K.; Murakami, K.; Yasuda, T.;
Iwayanagi, T.; Wagatsuma, M.; Shiratori, A.; Sudo, H.;
Hosoiri, T.; Kaku, Y.; Kodaira, H.; Kondo, H.; Sugawara, M.;
                                    Takahashi,M.; Kanda,K.; Yokoi,T.; Furuya,T.;
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                                    Ishibashi, T.; Yamashita, H.; Murakawa, K.; Fujimori, K.;
                                    Tanai,H.; Kimata,M.; Watanabe,M.; Hiraoka,S.; Chiba,Y.;
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Yosida,M.; Hotuta,T.; Kusano,J.; Kanehori,K.;
                                    Takahashi-Fujii,A.; Hara,H.; Tanase,T.; Nomura,Y.; Togiya,S.; Komai,F.; Hara,R.; Takeuchi,K.; Arita,M.; Imose,N.; Musashino,K.; Yuuki,H.; Oshima,A.; Sasaki,N.; Aotsuka,S.; Yoshikawa,Y.; Matsunawa,H.; Ichihara,T.;
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                                    Hishigaki, H.; Watanabe, T.; Sugiyama, A.; Takemoto, M.; Kawakami, B.; Yamazaki, M.; Watanabe, K.; Kumagai, A.;
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                                   Nomura, N.; Kikuchi, H.; Masuho, Y.; Yamashita, R.;
Nakai, K.; Yada, T.; Nakamura, Y.; Ohara, O.; Isogai, T.;
                                    Sugano, S.
     TITLE (TI):
                                    Complete sequencing and characterization of 21,243
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     JOURNAL (SO):
                                    Nat. Genet., 36 (1), 40-45 (2004)
    OTHER SOURCE (OS):
                                    CA 140:158332
REFERENCE:
    AUTHOR (AU):
                                    Isogai,T.; Ota,T.; Hayashi,K.; Sugiyama,T.; Otsuki,T.;
                                    Suzuki,Y.; Nishikawa,T.; Nagai,K.; Sugano,S.;
                                    Takahashi-Fujii,A.; Hara,H.; Tanase,T.; Nomura,Y.;
                                   Togiya,S.; Komai,F.; Hara,R.; Takeuchi,K.; Arita,M.; Nabekura,T.; Ishii,S.; Kawai,Y.; Saito,K.; Yamamoto,J.;
                                   wakamatsu,A.; Nakamura,Y.; Nagahari,K.; Masuho,Y.;
                                   Oshima, A.
     TITLE (TI):
                                   NEDO human cDNA sequencing project
     JOURNAL (SO):
                                   Unpublished
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                                        (bases 1 to 6060)
    AUTHOR (AU):
                                   Isogai,T.; Otsuki,T.
     TITLE (TI):
                                   Direct Submission
                                   Submitted (10-MAY-2001) Takao Isogai, Helix Research
    JOURNAL (SO):
                                   Institute, Genomics Laboratory; 1532-3 Yana, Kisarazu, Chiba 292-0812, Japan (E-mail:genomics@hri.co.jp,
                                   Tel:81-438-52-3975, Fax:81-438-52-3986)
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COMMENT:
     NEDO human cDNA sequencing project supported by Ministry of
     Economy, Trade and Industry of Japan; cDNA full insert sequencing:
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Research Institute (supported by Japan Key Technology Center etc.)
     and Department of Virology, Institute of Medical Science,
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REFERENCE:
   AUTHOR (AU):
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    TITLE (TI):
                                  Complete sequencing and characterization of 21,243
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                                  Isogai,T.; Ota,T.; Hayashi,K.; Sugiyama,T.; Otsuki,T.; Suzuki,Y.; Nishikawa,T.; Nagai,K.; Sugano,S.; Shiratori,A.; Sudo,H.; Wagatsuma,M.; Hosoiri,T.;
    AUTHOR (AU):
                                  Kaku, Y.; Kodaira, H.; Kondo, H.; Sugawara, M.;
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    TITLE (TI):
                                  NEDO human cDNA sequencing project
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                                     (bases 1 to 2306)
    AUTHOR (AU):
                                  Isogai, T.; Otsuki, T.
                                  Direct Submission
    TITLE (TI):
                                  Submitted (10-MAY-2001) Takao Isogai, Helix Research
    JOURNAL (SO):
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                                  Chiba 292-0812, Japan (E-mail:genomics@hri.co.jp,
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NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology; cDNA library construction, 5'- & 3'-end one pass sequencing and clone selection: Helix Research Institute (supported by Japan Key Technology Center etc.) and Department of Virology, Institute of Medical Science,
         University of Tokyo.
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     JOURNAL (SO):
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SEQUENCE LENGTH (SQL):
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MOLECULE TYPE (CI):
                               mRNA; linear
DIVISION CODE (CI):
                               Primates
DATE (DATE):
                                30 Jan 2004
DEFINITION (DEF):
                               Homo sapiens cDNA FLJ14533 fis, clone NT2RM2000407
                               moderately similar to Mus musculus
                                                                                ***semaphorin***
                                  ***VIa***
                                                 mRNA.
KEYWORDS (ST):
                               oligo capping; fis (full insert sequence)
SOURCE:
                               Homo sapiens (human)
 ORGANISM (ORGN):
                               Homo sapiens
                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                               Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
                               Hominidae; Homo
COMMENT:
      NEDO human cDNA sequencing project supported by Ministry of
      Economy, Trade and Industry of Japan; cDNA full insert sequencing:
      Research Association for Biotechnology; cDNA library construction,
      5'- & 3'-end one pass sequencing and clone selection: Helix
Research Institute (supported by Japan Key Technology Center etc.)
and Department of Virology, Institute of Medical Science,
      University of Tokyo.
REFERENCE:
   AUTHOR (AU):
                               Ota,T.; Suzuki,Y.; Nishikawa,T.; Otsuki,T.
                               Sugiyama, T.; Irie, R.; Wakamatsu, A.; Hayashi, K.;
                               Sato,H.; Nagai,K.; Kimura,K.; Makita,H.; Sekine,M.;
                               Obayashi,M.; Nishi,T.; Shibahara,T.; Tanaka,T.;
                               Ishii,S.; Yamamoto,J.; Saito,K.; Kawai,Y.; Isono,Y.;
                               Nakamura,Y.; Nagahari,K.; Murakami,K.; Yasuda,T.;
                               Iwayanagi,T.; Wagatsuma,M.; Shiratori,A.; Sudo,H.;
                               Hosoiri,T.; Kaku,Y.; Kodaira,H.; Kondo,H.; Sugawara,M.; Takahashi,M.; Kanda,K.; Yokoi,T.; Furuya,T.; Kikkawa,E.; Omura,Y.; Abe,K.; Kamihara,K.; Katsuta,N.; Sato,K.; Tanikawa,M.; Yamazaki,M.; Ninomiya,K.;
                               Ishibashi,T.; Yamashita,H.; Murakawa,K.; Fujimori,K.;
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Aotsuka,S.; Yoshikawa,Y.; Matsunawa,H.; Ichihara,T.;
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                                 Nakai,K.; Yada,T.; Nakamura,Y.; Ohara,O.; Isogai,T.;
    TITLE (TI):
                                 Complete sequencing and characterization of 21,243
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                                 Nat. Genet., 36 (1), 40-45 (2004)
    JOURNAL (SO):
                                 CA 140:158332
    OTHER SOURCE (OS):
REFERENCE:
                                 Isogai,T.; Ota,T.; Hayashi,K.; Sugiyama,T.; Otsuki,T.; Suzuki,Y.; Nishikawa,T.; Nagai,K.; Sugano,S.; Shiratori,A.; Sudo,H.; Wagatsuma,M.; Hosoiri,T.;
    AUTHOR (AU):
                                 Kaku, Y.; Kodaira, H.; Kondo, H.; Sugawara, M.;
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                                 Takiguchi,S.; Watanabe,S.; Kimura,K.; Murakami,K.;
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    TITLE (TI):
                                 NEDO human cDNA sequencing project
    JOURNAL (SO):
                                 Unpublished
                                     (bases 1 to 2123)
REFERENCE:
                                 Isogai, T.; Otsuki, T.
    AUTHOR (AU):
    TITLE (TI):
                                 Direct Submission
    JOURNAL (SO):
                                 Submitted (10-MAY-2001) Takao Isogai, Helix Research
                                 Institute, Genomics Laboratory; 1532-3 Yana, Kisarazu,
                                 Chiba 292-0812, Japan (E-mail:genomics@hri.co.jp,
                                 Tel:81-438-52-3975, Fax:81-438-52-3986)
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181 atcatgggca tgcagctgga cagagcaagc agctctctgt atgttgcgtt ctctacctgt
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    421 gactgtcaca attcctttgt ggcactgaat ggagtgattc gggaaagtta cctcaaaggc
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L4
       ANSWER 64 OF 86
                                   GENBANK.RTM.
                                                     COPYRIGHT 2004 on STN
LOCUS (LOC):
                                BG729430
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GenBank ACC. No. (GBN): BG729430
GenBank VERSION (VER):
                                BG729430.1 GI:14014505
CAS REGISTRY NO. (RN):
                                337152-08-6
SEQUENCE LENGTH (SQL):
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MOLECULE TYPE (CI):
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DIVISION CODE (CI):
                                Expressed sequence tag
DATE (DATE):
                                9 May 2001
DEFINITION (DEF):
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                                clone 4726726 5' similar to TR:035464 035464
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                                                              ***VIA***
                                                                              PRECURSOR.;, mRNA
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SOURCE:
                                zebrafish
 ORGANISM (ORGN):
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                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei;
                               Ostariophysi; Cypriniformes ; Cyprinidae; Danio
106 a 152 c 143 g 107 t
NUCLEIC ACID COUNT (NA): 106 a
COMMENT:
      Contact: Stephen L. Johnson
      Washington University School of Medicine
       4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108. USA
      Tel: 314 286 1800 Fax: 314 286 1810
      Email: zbrafish@watson.wustl.edu
      CDNA Library Preparation: Leonard Ira Zon DNA Sequencing by:
      Washington University Genome Sequencing Center Clone distribution:
      Genome Systems, St. Louis, Missouri (web address:
      www.genomesystems.com) (email contact: info@genomesystems.com) and
      Research Genetics, Huntsville, Alabama (web address: www.resgen.com
      ) (email contact: info@resgen.com) and
      RessourcenZentrumPrimarDatenbank, Berlin, Germany (web address:
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www.rzpd.de)

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Seq primer: T3 ET from Amersham
       High quality sequence stop: 480.
REFERENCE:
                                 1 (bases 1 to 508)
                                Clark,M.; Johnson,S.L.; Lehrach,H.; Lee,R.; Li,F.; Marra,M.; Eddy,S.y; Hillier,L.; Kucaba,T.; Martin,J.; Beck,C.; Wylie,T.; Underwood,K.; Steptoe,M.; Theising,B.; Allen,M.; Bowers,Y.; Person,B.; Swaller,T.; Gibbons,M.; Pape,D.; Harvey,N.; Schurk,R.;
    AUTHOR (AU):
                                Ritter, E.; Kohn, S.; Shin, T.; Jackson, Y.; Cardenas, M.;
                                McCann, R.; Wilson, R.
    TITLE (TI):
                                Washu Zebrafish EST Project 1998
    JOURNAL (SO):
                                Unpublished (1998)
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                           Location
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XhoI; Oligo dT cDNA library
                                                      constructed from mRNA pooled from
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                                                      adult zebrafish.'
SEQUENCE (SEQ):
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    481 gttcctcaag accatggtga ggtaccgg
L4
      ANSWER 65 OF 86
                                   GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                                BG642108
                                                  GenBank (R)
GenBank ACC. No. (GBN): BG642108
GenBank VERSION (VER):
                                BG642108.1 GI:13774034
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CAS REGISTRY NO. (RN):
SEQUENCE LENGTH (SQL):
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                                mRNA; linear
DIVISION CODE (CI):
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DATE (DATE):
                                23 Apr 2001
DEFINITION (DEF):
                                pgllc.pk002.g3 Chicken liver cDNA library Gallus gallus
                                cDNA clone pgllc.pk002.g3 5' similar to gi|9055334 ref|NP_061214.1| sema domain, transmembrane domain (TM), and cytoplasmic domain, ( ***semaphorin***

***6A*** [Mus musculus] sp|035464|SM6A_MOUSE

***SEMAPHORIN*** ***6A*** PRECURSOR (
                                                               ***VIA*** ) (SEMA VIA)
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                                (SEMAPHORIN Q) (SEMA Q) gb|AAB86408.1|, mRNA sequence.
SOURCE:
                                chicken.
                                Gallus gallus
 ORGANISM (ORGN):
                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                                Euteleostomi; Archosauria; Aves; Neognathae;
                                Galliformes; Phasianidae; Phasianinae; Gallus
NUCLEIC ACID COUNT (NA): 186 a
                                            120 c
                                                       147 g
                                                                  163 t
COMMENT:
      Contact: Larry A. Cogburn
      University of Delaware
      Townsend Hall, Newark, DE 19717, USA
      Tel: 302-831-1335
      Fax: 302-831-2822
      Email: cogburn@udel.edu, www.chickest.udel.edu.
REFERENCE:
                                1 (bases 1 to 622)
   AUTHOR (AU):
                                Morgan, R.W.; Burnside, J.; Cogburn, L.A.
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JOURNAL (SO):
                              Unpublished (2001)
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    181 gatgctgaaa attcgagaca cactttatat cgctggcagg gatcaagttt acactgtaaa
    241 čttaaatgaa gttccaaaat cagaagttac tccaagcagg aaattaacat ggaggtcaag
    301 gcagcaggac agagagaact gtgctatgaa aggaaaacat aaagatgaat gccataactt
    361 cattaaagtc ttcgttccaa gaaatgacga gatggtgttt gtctgtggaa caaatgcatt 421 taatcctatg tgcagatact atcggctgag tacgttagag tatgatgggg aggaaattag 481 tggtttggca agatgcccat ttgatgccag acaaaccaat gtcgnnnnnn ttgctgatgg 541 aaaatgtat tcagcaacag tagcagattt cctggcaagt gatgctgtta tttatcgcag
    601 catgggagat ggatctgccc ta
      ANSWER 66 OF 86
                                GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
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GenBank VERSION (VER):
                              BG553452.1 GI:13565232
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MOLECULE TYPE (CI):
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DIVISION CODE (CI):
                              Expressed sequence tag
DATE (DATE):
                              9 Apr 2001
                              dab84d05.y1 NICHD XGC Emb4 Xenopus laevis cDNA clone IMAGE:4203704 5' similar to TR:035464 035464
DEFINITION (DEF):
                                 ***SEMAPHORIN***
                                                          ***VIA*** PRECURSOR. ;, mRNA
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SOURCE:
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 ORGANISM (ORGN):
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Euteleostomi; Amphibia; Batrachia; Anura;
Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus
137 a 112 c 115 g 152 t
NUCLEIC ACID COUNT (NA): 137 a
COMMENT:
      Contact: Robert Strausberg, Ph.D.
      Email: cgapbs-r@mail.nih.gov
      Tissue Procurement: Martha Rebbert, Steven L. Klein, Ph.D.
       cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: Xenopus clones from this library are available
      through the I.M.A.G.E. Consortium/LLNL at: info@image.llnl.gov
      Seq primer: -40RP from Gibco
      High quality sequence stop: 386.
REFERENCE:
                              1 (bases 1 to 516)
   AUTHOR (AU):
                              NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
   TITLE (TI):
                              National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index
   JOURNAL (SO):
                              Unpublished (1997)
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  Feature Key Location
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/lab-host="DH10B
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(phage-resistant)"

Chicken liver ESTs (2001)

TITLE (TI):

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Vector: pCMV-SPORT6; Site-1: NotI; Site-2: SalI; Cloned unidirectionally. Primer: Oligo
                                             dT. Average insert size 2.1 kb.
                                             Constructed by Life Technologies.
                                             Note: This is a Xenopus Gene
                                             Collection (XGC ) library.
SEQUENCE (SEQ):
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   481 gggaaaattg ctacacctaa tacaactgct aaaatg
                             GENBANK.RTM. COPYRIGHT 2004 on STN
     ANSWER 67 OF 86
LOCUS (LOC):
                           AK004390
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GenBank ACC. No. (GBN): AK004390
GenBank VERSION (VER):
                           AK004390.1 GI:12835554
CAS REGISTRY NO. (RN):
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SEQUENCE LENGTH (SQL):
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MOLECULE TYPE (CI):
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DIVISION CODE (CI):
                           High-Throughput CDNA Sequencing
DATE (DATE):
                           3 Apr 2004
DEFINITION (DEF):
                          Mus musculus 18-day embryo whole body cDNA, RIKEN
                           full-length enriched library, clone:1110067B02 product:weakly similar to ***SEMAPHORIN***
                           product:weakly similar to ***SEMAPHORIN**
***6A*** PRECURSOR ( ***SEMAPHORIN***
                                                                               ***VIA***
                           ) (SEMA VIA) (SEMAPHORIN Q) (SEMA Q) [Mus musculus],
                           full insert sequence.
KEYWORDS (ST):
                          HTC; CAP trapper
SOURCE:
                          Mus musculus (house mouse)
 ORGANISM (ORGN):
                           Mus musculus
                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                           Euteleostomi; Mammalia; Eutheria; Rodentia;
                          Sciurognathi; Muridae; Murinae; Mus
COMMENT:
     Please visit our web site (http://genome.gsc.riken.jp/) for further
     details.
     cDNA library was prepared and sequenced in Mouse Genome
     Encyclopedia Project of Genome Exploration Research Group in Riken
     Genomic Sciences Center and Genome Science Laboratory in RIKEN.
     Division of Experimental Animal Research in Riken contributed to
     prepare mouse tissues. First strand cDNA was primed with a primer
     prepared by using trehalose thermo-activated reverse transcriptase
     and subsequently enriched for full-length by cap-trapper. Second
     strand cDNA was prepared with the primer adapter of sequence[5
     XhoI. Host: SOLR.
REFERENCE:
   AUTHOR (AU):
                          Carninci, P.; Hayashizaki, Y.
   TITLE (TI):
                          High-efficiency full-length cDNA cloning
   JOURNAL (SO):
                          Meth. Enzymol., 303, 19-44 (1999)
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                          Carninci,P.; Shibata,Y.; Hayatsu,N.; Sugahara,Y.;
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                          Normalization and subtraction of cap-trapper-selected
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                          Genome Res., 10 (10), 1617-1630 (2000)
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                          Shibata,K.; Itoh,M.; Aizawa,K.; Nagaoka,S.; Sasaki,N.;
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     TITLE (TI):
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                                       Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs Nature, 420, 563-573 (2002)
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                                        Institute of Physical and Chemical Research (RIKEN)
                                        Laboratory for Genome Exploration Research Group, RIKEN
                                       Genomic Sciences Center (GSC), RIKEN Yokohama
Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama,
Kanagawa 230-0045, Japan (E-mail:genome-
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L4 ANSWER 69 OF 86 GENBANK.RTM. COPYRIGHT 2004 on STN

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L4 ANSWER 70 OF 86 GENBANK.RTM. COPYRIGHT 2004 on STN

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NUCLEIC ACID COUNT (NA): 117 a
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COMMENT:
      Contact: Robert Strausberg, Ph.D.
      Email: cgapbs-r@mail.nih.gov
      Tissue Procurement: Gilbert Smith, Ph.D.
       cDNA Library Preparation: Life Technologies, Inc.
       cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
       DNA Sequencing by: Washington University Genome Sequencing Center
       Clone distribution: NCI-CGAP clone distribution information can be
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COMMENT:
       NEDO human cDNA sequencing project supported by Ministry of
       International Trade and Industry of Japan; cDNA full insert
       sequencing: Research Association for Biotechnology; cDNA library
       construction, 5'- & 3'-end one pass sequencing and clone selection:
       Helix Research Institute (supported by Japan Key Technology Center
       etc.) and Department of Virology, Institute of Medical Science,
       University of Tokyo.
REFERENCE:
    AUTHOR (AU):
                                 Ota,T.; Suzuki,Y.; Nishikawa,T.; Otsuki,T.
                                 Sugiyama, T.; Irie, R.; Wakamatsu, A.; Hayashi, K.;
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    TITLE (TI):
                                 Complete sequencing and characterization of 21,243
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                                 Nat. Genet., 36 (1), 40-45 (2004)
CA 140:158332
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REFERENCE:
                                 Isogai,T.; Ota,T.; Hayashi,K.; Sugiyama,T.; Otsuki,T.;
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    AUTHOR (AU):
                                 Shiratori, A.; Sudo, H.; Wagatsuma, M.; Hosoiri, T.;
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    TITLE (TI):
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    JOURNAL (SO):
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    AUTHOR (AU):
                                 Isogai, T.; Otsuki, T.
                                Direct Submission
    TITLE (TI):
    JOURNAL (SO):
                                Submitted (23-AUG-2000) Takao Isogai, Helix Research
                                Institute, Genomics Laboratory; 1532-3 Yana, Kisarazu, Chiba 292-0812, Japan (E-mail:genomics@hri.co.jp,
                                Tel:81-438-52-3975, Fax:81-438-52-3986)
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AUTHOR (AU):
                             Klostermann, A.; Behl, C.
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1 (bases 1 to 3862)

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L4
       ANSWER 73 OF 86
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SEQUENCE LENGTH (SQL):
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DIVISION CODE (CI):
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DATE (DATE):
                                  16 Sep 2000
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NUCLEIC ACID COUNT (NA): 45 a
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REFERENCE:
                                  1 (bases 1 to 216)
    AUTHOR (AU):
                                 Klostermann, A.; Behl, C.
    TITLE (TI):
                                            ***semaphorin***
                                                                          ***6a***
                                                                                          . ***1***
                                  (sema6a-a), a gene involved in neuronal development and
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                                 as a potential drug target
    JOURNAL (SO):
                                 Patent: WO 0031252-A 3 02-JUN-2000; KLOSTERMANN ANDREAS
                                  (DE); MAX PLANCK GESELLSCHAFT (DE); BEHL CHRISTIAN
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Location

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DATE (DATE):
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                        Klostermann, A.; Behl, C.
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   TITLE (TI):
                                                      ***6a*** - ***1***
                         (sema6a-a), a gene involved in neuronal development and
                         regeneration mechanisms during apoptosis, and its use
                         as a potential drug target
   JOURNAL (SO):
                         Patent: WO 0031252-A 1 02-JUN-2000; KLOSTERMANN ANDREAS
                         (DE) ; MAX PLANCK GESELLSCHAFT (DE) ; BEHL CHRISTIAN
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#### L4 **ANSWER 75 OF 86** GENBANK.RTM. COPYRIGHT 2004 on STN

LOCUS (LOC): AW343314 GenBank (R) GenBank ACC. No. (GBN): AW343314 AW343314.1 GI:6839680 GenBank VERSION (VER): CAS REGISTRY NO. (RN): 254706-97-3

SEQUENCE LENGTH (SQL): 664 MOLECULE TYPE (CI):

mRNA; linear

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                                  Ostariophysi; Cypriniformes ; Cyprinidae; Danio
168 a 148 c 177 g 171 t
NUCLEIC ACID COUNT (NA): 168 a 148 c
COMMENT:
       Contact: S.L. Johnson
Washington University School of Medicine
       4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
       Tel: 314 286 1800
       Fax: 314 286 1810
       Email: est@watson.wustl.edu
       Library constructed by Dr. Sumio Sugano and Dr. Koichi Kawakami DNA
       Sequencing by: Washington University Genome Sequencing Center
       Seq primer: T3 ET from Amersham
       High quality sequence stop: 478.
ENCE: 1 (bases 1 to 664)
REFERENCE:
                                 Sugano,S.; Kawakami,K.; Johnson,S.; Li,F.; Marra,M.; Eddy,S.; Hillier,L.; Clifton,S.; Allen,M.; Gibbons,M.; Jost,S.; Kucaba,T.; Martin,J.; Pape,D.; Steptoe,M.; Underwood,K.; Theising,B.; Ritter,E.; Bowers,Y.; Wylie,T.; Waterston,R.; Wilson,R.
    AUTHOR (AU):
    TITLE (TI):
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    JOURNAL (SO):
                                 Unpublished (1999)
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                                                        cDNA insert. Size selection was
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                                                        <1.5kb. Library constructed by
                                                        Dr. Sumio Sugano (University of
                                                        Tokyo Institute of Medical
                                                        Science) and kindly donated by Dr.
                                                       Koichi Kawakami. Custom primers
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                                                       primer CGACCTGCAGCTCGAGCACA.
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    661 ctac
       ANSWER 76 OF 86
                                     GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
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       Contact: Stephen L. Johnson
       Washington University School of Medicine
       4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
       Tel: 314 286 1800
Fax: 314 286 1810
Email: zbrafish@watson.wustl.edu
       cDNA Library Preparation: John Ngai. cDNA Library Arrayed by:
Matthew Clark. DNA Sequencing by: Washington University Genome
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       RessourcenZentrumPrimarDatenbank, Berlin, Germany (web address:
       www.rzpd.de)
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Clark,M.; Johnson,S.L.; Lehrach,H.; Lee,R.; Li,F.;
Marra,M.; Eddy,S.y; Hillier,L.; Kucaba,T.; Martin,J.;
Beck,C.; Wylie,T.; Underwood,K.; Steptoe,M.;
Theising,B.; Allen,M.; Bowers,Y.; Person,B.;
REFERENCE:
    AUTHOR (AU):
                                  Swaller, T.; Gibbons, M.; Pape, D.; Harvey, N.; Schurk, R.;
                                  Ritter, E.; Kohn, S.; Shin, T.; Jackson, Y.; Cardenas, M.;
                                  McCann, R.; Wilson, R.
    TITLE (TI):
                                  WashU Zebrafish EST Project 1998
                                  Unpublished (1998)
    JOURNAL (SO):
FEATURES (FEAT):
  Feature Key
                            Location
                                                               Qualifier
  =========+===++================++
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source
                      1..656
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                                                         /sex="mixed male and female"
                                                         /tissue-type="brain"
/dev-stage="adult"
/lab-host="E. coli DH10B"
/note="Vector: pZIPLOX; Site-1:
NotI; Site-2: SalI; Original
                                                         library was constructed in
                                                         lambdaZIPLOX. Mass excision of
                                                         the cDNA library was performed to
                                                         yield pZIPLOX plasmids. Insert
                                                         check was done in original
                                                         library.
```

L4

SEQUENCE (SEQ): 1 ctgctcgtgt gtgtggagct gaatgagcgc gcattgttcc tttggttgtt tctcctctac

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61 ccgcgcggat cgatcgatca gtgatcggat gtgatcggga tttttctgat ggatatatcq
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    481 gacaggcgga tgtggacacg tgcaggatga agggcaaaca caaggacgag tgtcataact
    541 tcatcaaggt gctcctgcag cagagtgagg actctctgtt tttgtgcggg accaacgcct
   601 tcaacccgtt ctgcaaaacc tacaggatgg acagtctgga ccctctgggt gaagaa
      ANSWER 77 OF 86
                                 GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                               AW128036
                                               GenBank (R)
GenBank ACC. NO. (GBN): AW128036
GenBank VERSION (VER):
                               AW128036.1 GI:6115940
CAS REGISTRY NO. (RN):
                               245383-36-2
SEQUENCE LENGTH (SQL):
MOLECULE TYPE (CI):
                               mRNA; linear
DIVISION CODE (CI):
                               Expressed sequence tag
DATE (DATE):
                               25 Oct 1999
DEFINITION (DEF):
                               fi06a12.y1 Sugano Kawakami zebrafish DRA Danio rerio
                               cDNA clone 2600350 5' similar to TR:035464 035464 ***SEMAPHORIN*** ***VIA*** .;, mRNA sequence.
SOURCE:
                               zebrafish.
 ORGANISM (ORGN):
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                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                               Euteleostomi; Actinopterygii; Neopterygii; Teleostei;
                               Ostariophysi; Cypriniformes ; Cyprinidae; Danio
202 a 182 c 212 g 202 t 4 others
NUCLEIC ACID COUNT (NA): 202 a
COMMENT:
      Other_ESTs: fi06a12.x1
      Contact: S.L. Johnson
      Washington University School of Medicine
      4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
      Tel: 314 286 1800 Fax: 314 286 1810
      Email: est@watson.wustl.edu
      Library constructed by Dr. Sumio Sugano and Dr. Koichi Kawakami DNA
      Sequencing by: Washington University Genome Sequencing Center
      Seq primer: T3 ET from Amersham
      High quality sequence stop: 488.
REFERENCE:
                               1 (bases 1 to 802)
                              Sugano, S.; Kawakami, K.; Johnson, S.; Li, F.; Marra, M.; Eddy, S.; Hillier, L.; Clifton, S.; Allen, M.; Gibbons, M.; Jost, S.; Kucaba, T.; Martin, J.; Pape, D.; Steptoe, M.;
   AUTHOR (AU):
                              Underwood,K.; Theising,B.; Ritter,E.; Bowers,Y.;
Wylie,T.; Waterston,R.; Wilson,R.
   TITLE (TI):
                               WashU Zebrafish EST Project 1999
   JOURNAL (SO):
                               Unpublished (1999)
FEATURES (FEAT):
                         Location
                                                        Qualifier
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                                                   zebrafish DRA
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resistant)"
                                                   /note="Vector: pME18S-FL3; Site-1:
                                                   DraIII (CACTGTGTG); Site-2: DraIII
                                                   (CACCATGTG); 1st_strand cDNA was
                                                   primed with an oligo(dT) primer
                                                    [ATGTGGCCTTTTTTTTTTTTTTTT];
                                                   double-stranded cDNA was ligated
                                                   to a DraIII adaptor
                                                   [TGTTGGCCTACTGG], digested and
                                                   cloned into distinct DraIII sites of the pME18S-FL3 vector (5' site
```

L4

CACTGTGTG, 3' site CACCATGTG).

XhoI should be used to isolate the CDNA insert. Size selection was performed to exclude fragments <1.5kb. Library constructed by Dr. Sumio Sugano (University of Tokyo Institute of Medical Science) and kindly donated by Dr. Koichi Kawakami. Custom primers for sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG and 3' end primer CGACCTGCAGCTCGAGCACA."

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SEQUENCE (SEQ):
      1 tttaaagaaa acacgggaaa tatggaataa gatggtgttc gaagccaaac ggttgacgga
   61 aagaacatgg tgttgctctg tcatcatggc gatggtctta ttagcctggc tcctccact
121 cattacttct gccacgcctt ttcctagaga tctgcagcca attagtgtgg tgggattgga
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   541 ggagctcttg ggtcaggcaa gatgtccatt tgagtctcga cagtgcaatg tangagtgtg
601 tgcacgtggt catttctatt cagccacagt gacggacttc caggcgagtg atgctgtgat
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721 atggctcana gagcctcatt ccctgcacgc tgtcgaatac cgggaactat ggtatttctt
   781 ctccaatgag aatgctgatg ag
      ANSWER 78 OF 86
                               GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                            AI800602
                                           GenBank (R)
GenBank ACC. NO. (GBN): AI800602
                            AI800602.1 GI:5366162
GenBank VERSION (VER):
CAS REGISTRY NO. (RN):
                            238193-66-3
SEQUENCE LENGTH (SQL):
MOLECULE TYPE (CI):
DIVISION CODE (CI):
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                            Expressed sequence tag
DATE (DATE):
                            19 Dec 1999
DEFINITION (DEF):
                            wg12d10.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens
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                               ***SEMAPHORIN***
                                                      ***VIA*** . ;, mRNA sequence.
SOURCE:
                            human.
 ORGANISM (ORGN):
                            Homo sapiens
                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                            Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
                            Hominidae; Homo
NUCLEIC ACID COUNT (NA): 208 a
                                       170 c
                                                157 g
                                                         279 t 6 others
COMMENT:
      Contact: Robert Strausberg, Ph.D.
      Email: cgapbs-r@mail.nih.gov
      This clone is available royalty-free through LLNL ; contact the
      IMAGE Consortium (info@image.llnl.gov) for further information.
                               Std Error: 0.00
      Insert Length: 1688
      Seq primer: -40UP from Gibco
      High quality sequence stop: 447.
REFERENCE:
                               (bases 1 to 820)
                            NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
   AUTHOR (AU):
   TITLE (TI):
                            National Cancer Institute, Cancer Genome Anatomy
Project (CGAP), Tumor Gene Index
   JOURNAL (SO):
                            Unpublished (1997)
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1..820
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                                               /lab-host="DH10B"
                                               /note="Organ: pooled; Vector:
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                                               modified polylinker; Site-1: Not
                                               I; Site-2: Eco RI; Equal amounts
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of plasmid DNA from five

normalized libraries were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 5 libraries. The pools consisted of the following libraries and cloneIDs: Soares NbHSF pool 1: 309384-310919, 323208-325895 Soares Nb2HP pool 1: 145032-147335, 147720-148103, 148872-149255, 15002 - 150407, 151176-152327 Soares Nb2HF8-9W pool 1: 758280-760583, 772104-774407 Soares NbHPA pool 1: 304776-306311, 320136-322823, 326280-326663 soares NbHOT pool 1: 723720-726407, 739080-740999 Subtraction by Bento Soares and M. Fatima Bonaldo.

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SEQUENCE (SEQ):
      1 ttttaatatt ttacagtcag gttttattac ttttaagtaa taaagagcct tttccttgct
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   181 aactttacaa caaatataaa tetgagtttg ttgcatctae cagtgtetag caagggtgga
   241 aagcaaaggc acactcgggt ttatggaccc tacccatata attcttacaa acctgagcca
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   361 agtagatata atctccgtaa tccacggctt gaacaaagta tggttctttc aaccattttg
   421 aatcgtgctt gacggtccgc agggtagggc tttctccaag actccggtaa atgactgcgt
   481 caatggcaag gaagtcagtc actgtggctg agtatagttn tccatctngc aacagtgcaa
541 cgttggcatg tttggcatca tatgggcatc tggccattcc actgaattca tccccgaatg
   601 tincaatgta tccaicttta tagitictgca ggaagggttg angggcatag ttccacagac 661 caacaatgca tcatccgttt tctttagaag aacttttann taagitgtggc aactcatcc
   721 tatgttttcc cttcattctg catgtggcta ccatcggcct gtctaagatt tcccatgcag
   781 tttttttgct acataaaatt tctttccggg gtgatgtgtt
L4
     ANSWER 79 OF 86
                            GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                          AI571889
                                         GenBank (R)
GenBank ACC. NO. (GBN): AI571889
GenBank VERSION (VER): AI571889.1 GI:4535263
CAS REGISTRY NO. (RN):
                          229599-17-1
SEQUENCE LENGTH (SQL):
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MOLECULE TYPE (CI):
                          mRNA; linear
                          Expressed sequence tag
DIVISION CODE (CI):
DATE (DATE):
                          12 May 1999
DEFINITION (DEF):
                          to20g10.x1 NCI_CGAP_Ut2 Homo sapiens cDNA clone
                          IMAGE:2179650 3' similar to TR:035464 035464
                             ***SEMAPHORIN***
                                                   ***VIA***
                                                               . ;, mRNA sequence.
SOURCE:
                          human.
 ORGANISM (ORGN):
                          Homo sapiens
                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                          Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
                          Hominidae; Homo
NUCLEIC ACID COUNT (NA): 94 a
                                   86 c
                                         89 g
                                                  145 t
COMMENT:
     Contact: Robert Strausberg, Ph.D.
     Email: cgapbs-r@mail.nih.gov
     Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.
     Emmert-Buck, M.D., Ph.D.
      CDNA Library Preparation: Life Technologies, Inc.
      CDNA Library Arrayed by: Greg Lennon, Ph.D.
      DNA Sequencing by: Washington University Genome Sequencing Center
      Clone distribution: NCI-CGAP clone distribution information can be
     found through the I.M.A.G.E. Consortium/LLNL at:
     www-bio.llnl.gov/bbrp/image/image.html
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     Seq primer: -40UP from Gibco
     POLYA=No.
REFERENCE:
                          1 (bases 1 to 414)
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NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.

National Cancer Institute, Cancer Genome Anatomy

AUTHOR (AU):

TITLE (TI):

Project (CGAP), Tumor Gene Index JOURNAL (SO): Unpublished (1997) FEATURES (FEAT): Feature Key Location Qualifier \_\_\_\_\_\_\_ /organism="Homo sapiens" source 1..414 /db-xref="taxon:9606" /clone="IMAGE:2179650" /clone-lib="NCI-CGAP-Ut2" /tissue-type="moderately-different iated endometrial adenocarcinoma, 3 pooled tumors" /lab-host="DH10B" /note="Organ: uterus; Vector: pCMV-SPORT6; Site-1: SalI; Site-2: NotI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.85 kb. Life Technologies catalog #: 11539-012' SEQUENCE (SEQ): 1 tttgttactg attttagaaa cagtattaag caccttgttg ttttgtttct gttttcaagg 61 aatgcagatt ctactaagat ctccttgcaa aatgaatgca tttaattttc cctatgtgtt 121 tttcctctgc aggtagtttt cccaagagtg gctcaggttt gtaagaatga tatgggagga 181 tctcaaagag tcctggagaa acagtggacg tcgttcctga aggcgcgctt gaactgctca 241 gttcctggag acctccattt ttatttcaac attcccagg cagtacaga gtgattcgt 301 atcaacgggc gtgatgttgt cctggcaacg ttttctacac cttataacag gtaatcatgc 361 cctagctgtg ttgacctcat caattcttcc tggcttcctt cttccagggg gttc 14 ANSWER 80 OF 86 GENBANK.RTM. COPYRIGHT 2004 on STN LOCUS (LOC): AI384100 GenBank (R) GenBank ACC. NO. (GBN): AI384100 GenBank VERSION (VER): AI384100.1 GI:4196881 CAS REGISTRY NO. (RN): 225337-06-4 SEQUENCE LENGTH (SQL): 547 MOLECULE TYPE (CI): DIVISION CODE (CI): mRNA; linear Expressed sequence tag 28 Mar 1999 DATE (DATE): **DEFINITION (DEF):** te36e07.x1 Soares\_NhHMPu\_S1 Homo sapiens cDNA clone IMAGE:2088804 3' similar to TR:035464 035464 \*\*\*VIA\*\*\* . ;, mRNA sequence. \*\*\*SEMAPHORIN\*\*\* SOURCE: human. ORGANISM (ORGN): Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo NUCLEIC ACID COUNT (NA): 131 a 119 c 119 q 178 t COMMENT: Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Insert Length: 639 Std Error: 0.00 Seq primer: -40UP from Gibco High quality sequence stop: 461. REFERENCE: 1 (bases 1 to 547) AUTHOR (AU): NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap. TITLE (TI): National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index JOURNAL (SO): Unpublished (1997) FEATURES (FEAT): Feature Key Location Qualifier /organism="Homo sapiens" /db-xref="taxon:9606" 1..547 source

/clone="IMAGE:2088804"

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/clone-lib="Soares-NhHMPu-S1" /tissue-type="Pooled human melanocyte, fetal heart, and

/note="Organ: mixed (see below); Vector: pT7T3D-Pac (Pharmacia)

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with a modified polylinker; Site-1: Not I; Site-2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (melanocyte 2NbHM, pregnant uterus NbHPU, and fetal heart NbHH19W) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 260232-265223, 340488-345479, and 484488-489479."
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   541 ctgggaa
L4
      ANSWER 81 OF 86
                                GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                              AI249189
                                              GenBank (R)
GenBank ACC. NO. (GBN): AI249189
GenBank VERSION (VER):
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SEQUENCE LENGTH (SQL):
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DIVISION CODE (CI):
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DATE (DATE):
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SOURCE:
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                              Hominidae; Homo
NUCLEIC ACID COUNT (NA): 109 a
                                         95 c
                                                 89 g
                                                          154 t
COMMENT:
      Contact: Robert Strausberg, Ph.D.
      Email: cgapbs-r@mail.nih.gov
      This clone is available royalty-free through LLNL; contact the
      IMAGE Consortium (info@image.llnl.gov) for further information.
      Insert Length: 654
                              Std Error: 0.00
      Seq primer: -40UP from Gibco
      High quality sequence stop: 436.
REFERENCE:
                                 (bases 1 to 447)
   AUTHOR (AU):
                             NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
   TITLE (TI):
                             National Cancer Institute, Cancer Genome Anatomy
                             Project (CGAP), Tumor Gené Index
   JOURNAL (SO):
                             Unpublished (1997)
FEATURES (FEAT):
  Feature Key
                        Location
                                                      Qualifier
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/clone="IMAGE:1849883"
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source
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                                                 conception fetus"
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/note="Organ: Liver and Spleen;
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                                            modified polylinker; Site-1: Pac
I; Site-2: Eco RI; This is a
subtracted version of the original
                                             Soares fetal liver spleen 1NFLS
                                             library. 1st strand cDNA was
                                             primed with a Pac I - oligo(dT)
                                             primer [5'
                                             AACTGGAAGAATTAATTAAAGATCTTTTTTTTT
                                             TTTTTTTT 3'], double-stranded
                                             cDNA was ligated to Eco RI
                                             adaptors (Pharmacia), digested with Pac I and cloned into the Pac
                                             I and Eco RI sites of the modified
                                             pT7T3 vector. Library went
                                             through one round of
                                             normalization. Library constructed
                                             by Bento Soares and M.Fatima
                                             Bonaldo.
     1 tgttactgat tttagaaaca gtattaagca ccttgttgtt ttgtttctgt tttcaaggaa
    61 tgcagatict actaagatct ccttgcaaaa tgaatgcatt taattttccc tatgtgtitt
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   301 caacgggcgt gatgttgtcc tggcaacgtt ttctacacct tataacaggt aatcatgccc
   361 tagcīgīgīt gaccīcātca afīcticcītg geticetici eccaagegīt eteticīaat
   421 aaaccatatt tgcaactgac tgaaaat
                             GENBANK.RTM. COPYRIGHT 2004 on STN
                                         GenBank (R)
                           AI247563.1 GI:3842960
                           219370-86-2
                          mRNA; linear
                           Expressed sequence tag
                           qh60e03.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo
                           sapiens cDNA clone IMAGE:1849084 3' similar to TR:035464 035464 ***SEMAPHORIN*** ***VIA
                           mRNA sequence.
                           Homo sapiens
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                           Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
                           Hominidae; Homo
                                   92 c
                                           79 a
                                                   113 t
     Contact: Robert Strausberg, Ph.D.
     This clone is available royalty-free through LLNL; contact the
     IMAGE Consortium (info@image.llnl.gov) for further information.
                              Std Error: 0.00
     High quality sequence stop: 307.
                           1 (bases 1 to 359)
                           NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
                          National Cancer Institute, Cancer Genome Anatomy
                          Project (CGAP), Tumor Gene Index
                          Unpublished (1997)
                                                 Qualifier
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                                             /clone="IMAGE:1849084"
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                                             /sex="male'
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resistant)"

SEQUENCE (SEQ):

ANSWER 82 OF 86

GenBank VERSION (VER): CAS REGISTRY NO. (RN):

SEQUENCE LENGTH (SQL):

MOLECULE TYPE (CI): DIVISION CODE (CI):

DEFINITION (DEF):

ORGANISM (ORGN):

GenBank ACC. NO. (GBN): AI247563

NUCLEIC ACID COUNT (NA): 75 a

Insert Length: 1108

Email: cgapbs-r@mail.nih.gov

Seq primer: -40UP from Gibco

1..359

Location

AI247563

1 Dec 1998

human.

359

L4

LOCUS (LOC):

DATE (DATE):

SOURCE:

COMMENT:

REFERENCE:

source

AUTHOR (AU):

JOURNAL (SO):

TITLE (TI):

FEATURES (FEAT): Feature Key

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resistant)"
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Vector: pT7T3D (Pharmacia) with a
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                                            I; Site-2: Eco RI; This is a
                                            subtracted version of the original
                                            Soares fetal liver spleen 1NFLS
                                            library.
                                                       1st strand cDNA was
                                            primed with a Pac I - oligo(dT)
                                            primer [5
                                            AACTGGAAGAATTAATTAAAGATCTTTTTTTTT
                                            TTTTTTTT 3'], double-stranded cDNA was ligated to Eco RI
                                           adaptors (Pharmacia), digested with Pac I and cloned into the Pac
                                            I and Eco RI sites of the modified
                                            pT7T3 vector. Library went
                                            through one round of
                                            normalization. Library constructed
                                            by Bento Soares and M.Fatima
                                            Bonaldo.
     1 atctttctct gttgtatttt tccgtcttgt acactctttc cttatggtga attgccttga
   61 ctgcctttta ttaccaaggg tatttgttgg atcacagaat ctttatttct taagagatat
121 ttgctgcttc tacttaagtc acaatccttt gtcacaggac aatcatttcc acagcaacca
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   241 tcacceteît ggccattgca gicalecigg etticgteat gggggeegte ticiegggea
   301 tcaccgtcta ctgcgtctgt gatcatcggc gcaaagacgt gggaaaactg ggccgcgtg
                            GENBANK.RTM. COPYRIGHT 2004 on STN
                                        GenBank (R)
                          AI240716.1 GI:3836113
                          219272-64-7
                          mRNA; linear
                          Expressed sequence tag
                          1 Dec 1998
                          qh50a02.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo
                          sapiens cDNA clone IMAGE:1848074 3' similar to TR:035464 035464 ***SEMAPHORIN*** ***VIA
                                                                      ***VTA***
                          mRNA sequence.
                          Homo sapiens
                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                          Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
                          Hominidae; Homo
                                          59 g
                                   76 c
                                                  101 t
     Contact: Robert Strausberg, Ph.D.
     Email: cgapbs-r@mail.nih.gov
     This clone is available royalty-free through LLNL; contact the
     IMAGE Consortium (info@image.llnl.gov) for further information.
                            Std Error: 0.00
     Seq primer: -40UP from Gibco
     High quality sequence stop: 239.
                          1 (bases 1 to 299)
                          NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
                          National Cancer Institute, Cancer Genome Anatomy
                          Project (CGAP), Tumor Gene Index
                          Unpublished (1997)
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/dev-stage="20 week-post

SEQUENCE (SEQ):

LOCUS (LOC):

DATE (DATE):

SOURCE:

COMMENT:

REFERENCE:

source

AUTHOR (AU):

JOURNAL (SO):

TITLE (TI):

FEATURES (FEAT): Feature Key

ANSWER 83 OF 86

GenBank VERSION (VER):

CAS REGISTRY NO. (RN): SEQUENCE LENGTH (SQL):

MOLECULE TYPE (CI): DIVISION CODE (CI):

DEFINITION (DEF):

ORGANISM (ORGN):

GenBank ACC. NO. (GBN): AI240716

NUCLEIC ACID COUNT (NA): 63 a

Insert Length: 1136

AI240716

299

human.

Location

1..299

L4

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conception fetus"
/lab-host="DH10B (ampicillin
resistant)"
                                          /note="Organ: Liver and Spleen;
                                          Vector: pT7T3D (Pharmacia) with a
                                          modified polylinker; Site-1: Pac
                                          I; Site-2: Eco RI; This is a
                                          subtracted version of the original
                                          Soares fetal liver spleen 1NFLS
                                          library.
                                                      1st strand cDNA was
                                          primed with a Pac I - oligo(dT)
                                          primer [5
                                          AACTGGAAGAATTAATTAAAGATCTTTTTTTTT
                                          TTTTTTTTT 3'], double-stranded cDNA was ligated to Eco RI
                                          adaptors (Pharmacia), digested with Pac I and cloned into the Pac
                                          I and Eco RI sites of the modified
                                          pT7T3 vector. Library went
                                          through one round of
                                          normalization. Library constructed
                                          by Bento Soares and M.Fatima
                                          Bonaldo.
  1 atctttctct gttgtatttt tccgtcttgt acactctttc cttatggtga attgccttga
 61 ctgcctttta ttaccaaggg tatttgttgg atcacagaat ctttatttct taagagatat
121 ttgctgcttc tacttaagtc acaatccttt gtcacaggac aatcatttcc acagcaacca
181 actgtgatgt cacaattgaa gggaggagga ccctcaaagg ccacgaccag ctggttcccg
241 tcaccetett ggccattgca gtcatectgg ctttcgtcat gggggccgtc ttetcggca
                          GENBANK.RTM. COPYRIGHT 2004 on STN
                                      GenBank (R)
                       AI122050.1 GI:3522374
                       mRNA; linear
                       Expressed sequence tag
                        uc46b03.r1 Soares_mammary_gland_NMLMG Mus musculus cDNA
                       clone IMAGE:1401005 5' similar to TR:035464 035464
                                                 ***VIA*** . ;, mRNA sequence.
                          ***SEMAPHORIN***
                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia;
                       Sciurognathi; Muridae; Murinae; Mus
                                43 c
                                         51 g
                                                42 t
  Contact: Marra M/Mouse EST Project
  Washington University School of MedicineP
  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
  Email: mouseest@watson.wustl.edu
  This clone is available royalty-free through LLNL; contact the
  IMAGE Consortium (info@image.llnl.gov) for further information.
  Trace considered overall poor quality
  Possible reversed clone: similarity on wrong strand
  Seq primer: -28m13 rev2 ET from Amersham
                           (bases 1 to 163)
                       Marra,M.; Hillier,L.; Allen,M.; Bowles,M.; Dietrich,N.; Dubuque,T.; Geisel,S.; Kucaba,T.; Lacy,M.; Le,M.; Martin,J.; Morris,M.; Schellenberg,K.; Steptoe,M.;
                       Tan, F.; Underwood, K.; Moore, B.; Theising, B.; Wylie, T.;
                       Lennon, G.; Soares, B.; Wilson, R.; Waterston, R.
                       The WashU-HHMI Mouse EST Project
                       Unpublished (1996)
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FEATURES (FEAT): Feature Key

TITLE (TI):

JOURNAL (SO):

AUTHOR (AU):

SEQUENCE (SEQ):

LOCUS (LOC):

DATE (DATE):

SOURCE:

COMMENT:

REFERENCE:

ANSWER 84 OF 86

GenBank VERSION (VER):

CAS REGISTRY NO. (RN):

SEQUENCE LENGTH (SQL):

MOLECULE TYPE (CI):

DIVISION CODE (CI):

DEFINITION (DEF):

ORGANISM (ORGN):

GenBank ACC. NO. (GBN): AI122050

NUCLEIC ACID COUNT (NA): 27 a

Tel: 314 286 1800 Fax: 314 286 1810

WashU-HHMI Mouse EST Project

High quality sequence stop: 1.

AI122050

163

214710-75-5

2 Sep 1998

house mouse.

Mus musculus

L4

Location

Qualifier

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/tissue-type="mammary gland"
                                          /lab-host="DH10B"
                                          /note="Vector: pT7T3D-Pac
                                          (Pharmacia) with a modified
                                          polylinker; 1st strand cDNA was
                                          prepared from mammary gland tissue
                                          from a lactating female, and was then primed with a Not I -
                                          oligo(dT) primer. Double-stranded cDNA was ligated to Eco RI
                                          adaptors (Pharmacia), digested
                                          with Not I and cloned into the
                                          Not I and Eco RI sites of the
                                          modified pT7T3 vector. Library is
                                          normalized. Library was
                                          constructed by Bento Soares and M.
                                          Fatima Bonaldo.
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     1 gatcataggg ctggagctgg acactgaggg tcacaggctt tttgtggcct ttcctggatg
    61 tatogtotac ototototoa googgigige cogogaigga goaigicaga ggagoigooi
   121 ggcttctctg gacccatact gtggatggca tcgatccaga ggc
L4
     ANSWER 85 OF 86
                           GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                         AA939047
                                       GenBank (R)
GenBank ACC. No. (GBN): AA939047
GenBank VERSION (VER):
                         AA939047.1 GI:3098960
CAS REGISTRY NO. (RN):
                         207372-37-0
SEQUENCE LENGTH (SQL):
                         487
MOLECULE TYPE (CI):
                         mRNA; linear
DIVISION CODE (CI):
                         Expressed sequence tag
DATE (DATE):
                         7 Jul 1998
                         op56h03.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone
DEFINITION (DEF):
                         IMAGE:1580885 3' similar to TR:035464 035464
                           ***SEMAPHORIN***
                                                 ***VIA***
                                                             . ;, mRNA sequence.
SOURCE:
                         human.
 ORGANISM (ORGN):
                         Homo sapiens
                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
                         Hominidae; Homo
NUCLEIC ACID COUNT (NA): 124 a
                                   146 c
                                           117 g
                                                    100 t
COMMENT:
     Contact: Robert Strausberg, Ph.D.
     Email: cgapbs-r@mail.nih.gov
     This clone is available royalty-free through LLNL; contact the
     IMAGE Consortium (info@image.linl.gov) for further information.
     Insert Length: 1276 Std Error: 0.00
Seq primer: -40m13 fwd. ET from Amersham
     High quality sequence stop: 242.
REFERENCE:
                            (bases 1 to 487)
   AUTHOR (AU):
                         NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
   TITLE (TI):
                         National Cancer Institute, Cancer Genome Anatomy
                         Project (CGAP), Tumor Gene Index
                         Unpublished (1997)
   JOURNAL (SO):
FEATURES (FEAT):
  Feature Key
                     Location
                                              Qualifier
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                                          ́/lab-host="DH10В'
                                          /note="Organ: pooled; Vector:
                                          pT7T3D-Pac (Pharmacia) with a
                                          modified polylinker; Site-1: Not
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I; Site-2: Eco RI; Equal amounts of plasmid DNA from three

normalized libraries (fetal lung NbHL19W, testis NHT, and B-cell NCI-CGAP-GCB1) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 297480-302087, 682632-687239, 726408-728711, and 729096-731399. Subtraction by Bento Soares and M. Fatima Bonaldo. "

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      1 tttcatgcag gacattgatt tatttgttca aaaagtaccc tactgtgtgc caagtactga
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    481 caagece
L4
      ANSWER 86 OF 86
                                GENBANK.RTM. COPYRIGHT 2004 on STN
LOCUS (LOC):
                             AF030430
                                             GenBank (R)
GenBank ACC. NO. (GBN): AF030430
GenBank VERSION (VER): AF030430
                             AF030430.1 GI:2623161
CAS REGISTRY NO. (RN):
                             200046-44-2
SEQUENCE LENGTH (SQL):
                             2770
MOLECULE TYPE (CI):
                             mRNA; linear
                             Rodents
DIVISION CODE (CI):
DATE (DATE):
                             15 Nov 1997
DEFINITION (DEF):
                             Mus musculus
                                                ***semaphorin***
                                                                         ***VIa***
                                                                                        mRNA,
                             complete cds.
SOURCE:
                             house mouse.
 ORGANISM (ORGN):
                             Mus musculus
                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                             Euteleostomi; Mammalia; Eutheria; Rodentia;
Sciurognathi; Muridae; Murinae; Mus
720 a 735 c 701 g 614 t
NUCLEIC ACID COUNT (NA): 720 a
                                                  701 g
REFERENCE:
                             1 (bases 1 to 2770)
   AUTHOR (AU);
                             Zhou,L.; White,F.A.; Lentz,S.I.; Wright,D.E.;
                             Fisher, D.A.; Snider, W.D.
   TITLE (TI):
                             Cloning and expression of a novel murine semaphorin
                             with structural similarity to insect semaphorin I
   JOURNAL (SO):
                             Mol. Cell. Neurosci., 9 (1), 26-41 (1997)
   OTHER SOURCE (OS):
                             CA 127:106980
                                 (bases 1 to 2770)
REFERENCE:
                             2
   AUTHOR (AU):
                             Zhou, L.
   TITLE (TI):
                             Direct Submission
                             Submitted (17-OCT-1997) Neurology, Washington
   JOURNAL (SO):
                             University, 660 S. Euclid Ave., St. Louis, MO 63110,
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VDIDTSHTEEIYCSKKLTWKSRQA

TNAFNPSCRNYRVDTLETFGDEFS

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**GMARCPYDAKHANIALFADGKLYSATVTDFLAID** AVIYRSLGDSPTLRTVKHDSKWLK **EPYFVQAVDYGDYIYFFFREIAVEYNTMGKVVFP** RVAQVCKNDMGGSQRVLEKQWTSF LKARLNCSVPGDSHFYFNILQAVTDVIRINGRDV VLATFSTPYNSIPGSAVCAYDMLD **IANVFTGRFKEQKSPDSTWTPVPDERVPKPRPGC** CAGSSSLEKYATSNEFPDDTLNFI KTHPLMDEAVPSIINRPWFLRTMVRYRLTKIAVD NAAGPYQNHTVVFLGSEKGIILKF LARIGSSGFLNGSLFLEEMNVYNPEKCSYDGVED KRIMGMQLDRASGSLYVAFSTCVI KVPLGRCERHGKCKKTCIASRDPYCGWVRESGSC AHLSPLSRLTFEQDIERGNTDGLG **DCHNSFVALNGHASSLYPSTTTSDSASRDGYESR GGMLDWNDLLEAPGSTDPLGAVSS HNHQDKKGVIRESYLKSNDQLVPVTLLAIAVILA FVMGAVFSGIIVYCVCDHRRKDVA** VVQRKEKELTHSRRGSMSSVTKLSGLFGDTQSKD **PKPEAILTPLMHNGKLATPSNTAK** MLIKADQHHLDLTALPTPESTPTLQEKRKPNRGS REWERNQNIINACTKDMPPMGSPV IPTDLPLRASPSHIPSVVVLPITQQGYQHEYVDQ **PKMSEVVAQMALEDQAATLEYKTI** KEHLSSESSPYVLKQFSEAFNRQGIILSVAVE"

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